DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY
GANGURU :: VIJAYAWADA – 521 139
(Approved by AICTE New Delhi, Permanently Affiliated to JNTU Kakinada)
ISO 9001:2015 Certified Institution, Accredited by NBA for ME, EEE, ECE & CSE.
E-mail: diet.principal@gmail.com, principal@diet.ac.in, website: www.diet.ac.in, Phone: +91-8333924842, 8333924843

List of Seminars/Workshops

A.Y.2022-23

S. No.	Name of the Programme	Date	No. of Participants	Details of the Resource Person
1	Research On Advanced Power Electronic Converters For Electric Vehicles Applications	13-8-2022	28	Dr. K Venkata Rami Reddy, Asst. prof. SKIT, A.P.
2	Research funding & Grant writing tips	20-09-2022	61	Dr.Y.P. PrabakaraRao IISC-Bangalore
3	Anveshana leading towards IPR	13-10-2022	110	SV Bhaskar Project Manager Agastya Foundation Bangalore
4	Role of IPR in Industry and Academia	13-10-2022	91	Dr. P Surendra VVIT, Nambur
5	A One Day Seminar on Latest Trends of Research in Machine Learning	15-10-2022	38	Dr. Rajesh Gogineni Assoc. prof ECE, DIET
6	Identifying Potential research applications in smart agriculture	09-11-2022	20	Pranadhara Foundation, Bapatla
7	EISC (Entrepreneurship, Innovation & Startup Center)	1-12-2022	98	Dr Geetha Reddy Chair person AP state counsil
8	Lean Canvas & Pitch Deck	24-12-2022	84	Dr. Geetha Reddy Chair person AP state counsil
9	Khadi and Village Industries Commission (Entrepreneurship Opp.s)	23-1-23,24-1-23	81	Mrs. Ch .Sobha Rani Asst. Director, KVIC
10	Startup Conclave on Emerging Technologies and Opportunities… ahead	22-2-2023	20	STPI, Vijayawada
11	Importance of Research and Strategies for successful research proposals	13-03-2023	52	Rao V. Mulpuri Professor GMU,USA

12	Drones Technology- Types, Applications and Research perspectives	23-03-2023	57	Nir Zendler, CEO Dronix, Israel
13	Writing research papers in the right way using LATEX	23-03-2023	30	Dr. K. Sandeep DIET
14	Research And Latest Control Techniques For Smart Grid	2-11-2023	26	Dr. K. Venkata Rami Reddy Asst. Prof, SKIT

IQAC Coordinator

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Ganguru, Vijayawada-521 139

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List of Seminars/Workshops

A.Y.2021-22

S.No.	Name of the Programme	Date	No. of Participants	Details of the Resource Person
1	Angel Investment /venture capital funding opportunity for early stage Entrepreneurs	30-6-2021	81	Dr Rajasekhar Mamillapalli Advisor, Namaste Kisaan
2	Research on performance evaluation of glass fiber reinforced concrete in construction	14-07-2021	70	B. Ramakrishna Asst. Prof SR Gudlavalleru Engg. college
3	A One Day "Seminar On Research Challenges & Issues in Big Data"	20-11-2021	53	Dr. A .Sudhir Babu Director-academics Vignan, Hyd
4	SAMBHAV-a National level awareness programme (e-NLAP) for Entrepreneurship development under Govt. sponsored scheme	30-11-2021	72	Dr. Greep State Director KVIC
5	One day seminar on avenues form Mechanical Engineers	28-12-2021	28	Dr. S Ajaya Kumar SVEC, Suryapet
6	Drug awareness & prevention-for young Entrepreneurs	29-12-2021	619	Shri Kaushal Kishore Minister of state for housing and urban affairs, Govt. of India
7	Introduction to Entrepreneurship	18-1-2022	93	Mr. Ch Swapan Siddharth CEO, GBI
8	Two days workshop on MATLAB-SIMULINK tools for research on Mechatronics systems	11-02-2022, 12-02-2022	42	Mr. PV SivaTeja Asst. Prof DIET

9	New Generative AI research and it's Industrial applications	5-03-2022	75	Mr. M Teja kIran Kumar, Co-founder, Yantrisiksha technologies
10	A One-Day Work Shop on Latex Tools for Writing Research Paper	10-03-2022	42	Dr. M Vamshi Krishna, Prof in ECE, DIET
11	Communication Technology: From Software controlled to software defined-Research Scope and opportunities	15-03-2022	49	Dr. MANS Raghavendra, Sankhya Labs Pvt. Ltd
12	Research Methodology & tools for Publication	16-04-2022	24	Dr K. Sowmya HOD-IT DIET

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GANGURU-521 139

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List of Seminars/Workshops

A.Y.2020-21

S.No.	Name of the Programme	Date	No. of Participants	Details of the Resource Person
1	A One Day "Workshop on Art of Writing and Publishing an Effective Research Paper"	05-12-2020	43	Dr. K Sowmya, Prof & HOD, DIET
2	Research on advanced construction technologies in optimization of resources	15-03-2021	54	V. Narasimha Rao Asst. Prof. KITS, Hyderabad
3	Creating Awareness of Intellectual Property Rights and Industry Academia	08-04-2021	43	Mrs. A Hima Bindu MD, Novel Patent services, Vizag

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DIET
GANGURU-521 139

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(Approved by AICTE New Delhi, Permanently Affiliated to JNTU Kakinada)
ISO 9001:2015 Certified Institution, Accredited by NBA for CE, ME, EEE & ECE.
E-mail: diet.principal@gmail.com, website: www.diet.ac.in, Phone: 0866-2583842

List of Seminars/Workshops

A.Y.2019-20

S.No.	Name of the Programme	Date	No. of Participants	Details of the Resource Person
1	Job Vs Entrepreneurship as a profession	30-8-2019	140	Dr. N Vishnu Vardhana Rao
2	The Sedibus hustle talk-the idea book	12-9-2019	66	Raja Sekhar Vasa, Happy Adda Cofounder
3	A One Day Workshop on "Open Source Tools for Research	28-09-2019	38	Dr. M Tanooj Kumar, Professor, DIET
4	Intellectual Property Protection of Innovation	15-10-2019	61	Dr. H. Purushotham, MD -NRDC
5	Awareness about start up and entrepreneur ideation	30-11-2019	80	Ch. Swapan Siddhartha, GBI Representative
6	A One Day Seminar on Research Fundamentals	10-01-2020	43	Dr. G Krishna Kishore, Assoc. Prof. , VRSEC

IQAC Coordinator

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DIET
GANGURU

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E-mail: diet.principal@gmail.com, website: www.diet.ac.in, Phone: 0866-2583842

List of Seminars/Workshops

A.Y.2018-19

S. No	Name of the Programme	Date	No. of Participants	Details of the Resource Person
1	A program on Entrepreneurship in modified hydroelectric turbines	5-7-2018	92	Mr. G.K Ratnakar
2	A Two Day Workshop on "Research Methodology"	23-10-2018, 24-10-18	37	Dr. R. Satya Prasad
3	Workshop on Intellectual Property	24-11-2018	91	Dr. H Purushotham, Chairman (NRDC)
4	sources innovation in rural background	1-12-2018	97	Mr. J Durga Prasad
5	Entrepreneurship ecosystem, update about smart idea pitch and win contest 2018	21-12-2018	82	Mr. Udayan Bakshi Coach & Mentor, IEES, Hyderabad
6	Innovation Day	09-03-2019	65	Mr. Maneesh Founder & Director World One solutions
7	A One Day Seminar on "How to Write a Research Proposal"	18-03-2019	42	Dr. T. Balamurali Krishna Professor & HOD SSIET

IQAC Coordinator

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Ganguru, Vijayawada-521 139

Annexure-13

OPTRONICS Engineering Ltd

DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to JNTU, Kakinada)
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GANGURU: VIJAYAWADA – 521 139

CONSULTANCY PROJECT

Account Statement

Sl.No	Invoice Date	Consultancy Work bill for the Month	Invoice Amount	Amount credited for the Month of	Amount Credited
1	27-04-2023	April	$500		
2	29-05-2023	May	$500		
3	27-06-2023	-	-	April + May	80913.03
4	01-07-2023	June	$500		
5	31-07-2023	July	$500		
6	02-09-2023	August	$500		
7	05-09-2023	-	-	June + July	82510.00
8	20-09-2023	-	-	August	40785.39
9	03-10-2023	September	$500		
10	18-10-2023	-	-	September	40790.38
11	02-11-2023	October	$500		
12	21-11-2023	-	-	October	40840.29
13	02-12-2023	November	$500		
					285839.00

Amount credited: Two lakhs Eighty Five Thousand Eight Hundred and Thirty Nine Only.

02/12/23

Principal Investigator

(Dr. K. Sandeep)

Dhanekula Institute of Engineering & Technology

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An ISO 9001- 2015 Certified Institution

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E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

Dr. Ravi Kadiyala

B.Tech. M.E., Ph.D.

Principal

Ref: DHAN/IE&T/DRONIX COE/Bill/4

27/04/2023

Invoice

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Image Super-Resolution using Generative Adversarial Networks (GANs)	No. of hours: 63	09-May-2023

No. of Hours	DESCRIPTION	UNIT PRICE (Dollars per hour)	Amount
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items 1. Dataset Preparation 2. Model Architecture	8	$200 $300
		Sub Total	$500.00
		Others	$00.00
		Total	$500.00

27/4/23

Principal Investigator

Principal, DIET

Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

Enclosures:

1. Account Details

Dhanekula Institute of Engineering & Technology

(Approved by AICTE, Permanently Affiliated to JNTU, Kakinada)

An ISO 9001- 2015 Certified Institution

Ganguru, Vijayawada - 521 139, Ph. : 8333924842, 8333924843, 9441675588, Mob. : 9491017088

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Dr. Ravi Kadiyala
B.Tech. M.E., Ph.D.
Principal

Ref: DHAN/IE&T/DRONIX COE/Bill/5

29/05/2023

Invoice

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Image Super-Resolution using Generative Adversarial Networks (GANs)	No. of hours: 63	09-June-2023

No. of Hours	DESCRIPTION	UNIT PRICE (Dollars per hour)	Amount
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items **1. Creating The Configuring Pipeline** **2. Building &Training the GAN:** Train the GAN model using the prepared dataset.	8	$200 $300
		Sub Total	$500.00
		Others	$00.00
		Total	$500.00

29/5/23
Principal Investigator

Principal, DIET
Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

Enclosures:

1. Account Details

Finacle

Universal Banking Solution from Infosys

Account Ledger Inquiry

Help

A/c. ID	154111100000043 INR 15411 DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY		
A/c. Status	ACTIVE	**A/c. Status Date**	01-08-2019
A/c. Open Date	05-08-2009	**A/c. Close Date**	
GL Subhead	10200	**A/c. Type**	CUSTOMER ACCOUNT
Opening Bal.	INR 83,19,620.01 CR.	**Available Amt.**	INR 1,04,98,492.54 CR.
Closing Bal.	INR 1,04,98,492.54 CR.	**Effective Available Amt.**	INR 1,04,98,492.54 CR.
Funds in Clg.	INR 0.00 CR.	**Float Bal.**	INR 0.00 CR.

Page 1 of 1

Tran. Date	Value Date	Instr. No.	Particulars	CCY	Debit Amt.	Credit Amt.	Bal.
30-06-2023	30-06-2023		NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23181	INR		5,92,070.00	1,04,98,492.54CR.
30-06-2023	30-06-2023		154120100002519 Int:56875.00 and TAX:5687.00.	INR		51,188.00	99,06,422.54CR.
28-06-2023	28-06-2023		NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23179	INR		5,60,241.00	98,55,234.54CR.
27-06-2023	27-06-2023		06061I13R2374413CRE001	INR	Dronix	80,913.03	92,94,993.54CR.
27-06-2023	27-06-2023		NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23178	INR		8,94,460.50	92,14,080.51CR.

OK

30/6/23

Dhanekula Institute of Engineering & Technology

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E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

Dr. Ravi Kadiyala

B.Tech. M.E., Ph.D.

Principal

Ref: DHAN/IE&T/DRONIX COE/Bill/6

01/07/2023

Invoice

Bill To

OPTRONICS ENGINEERING LTD.

327, MAIN STREET SHEFAYIM 6099000

ISRAEL.

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Implementing the Super-Resolution using Generative Adversarial Networks (GANs)	No. of hours: 63	09-July-2023
No. of Hours	DESCRIPTION	UNIT PRICE (Dollars per hour)	Amount
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items 1. **Implementing the SRGAN Loss Function** 2. **Implementing the SRGAN Architecture**	8	$500

Sub Total	$500.00
Others	$00.00
Total	$500.00

01/07/23

Principal Investigator

(Dr. K. Sandeep)

Principal, DIET

Enclosures: Account Details

Dhanekula Institute of Engineering & Technology

(Approved by AICTE, Permanently Affiliated to JNTU, Kakinada)

An ISO 9001- 2015 Certified Institution

Ganguru, Vijayawada - 521 139, Ph. : 8333924842, 8333924843, 9441675588, Mob. : 9491017088

E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

Dr. Ravi Kadiyala
B.Tech. M.E., Ph.D.
Principal

Ref: DHAN/IE&T/DRONIX COE/Bill/7

31/07/2023

Invoice

Bill To
OPTRONICS ENGINEERING LTD.
327, MAIN STREET SHEFAYIM 6099000
ISRAEL.

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Implementing the Super-Resolution using Generative Adversarial Networks (GANs)	No. of hours: 63	09-Aug-2023
No. of Hours	**DESCRIPTION**	**UNIT PRICE (Dollars per hour)**	**Amount**
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items 1. **Implementing discriminator** 2. **Implementing the SRGAN Training module.**	8	$500

Sub Total	$500.00
Others	$00.00
Total	$500.00

31/7/23

Principal Investigator
(Dr. K. Sandeep)

Principal, DIET
Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

Enclosures:

1. Account Details

Finacle

Universal Banking Solution from Infosys

Transaction Inquiry

Help

A/c. ID	154111100000043	CCY/SOL ID	INR/15411
A/c. Name	DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY		
General Ledger Subhead Code	10200	Balance	35,54,506.80 Cr
Opening Balance	18,30,874.32 Cr	Closing Balance	32,52,356.80 Cr
Float Balance	0.00 Cr	Funds in Clearing	0.00 Cr
Available Amt.	35,54,506.80 Cr	Effective Available Amt.	35,54,506.80 Cr
Customer Status	999 OTHERS	A/c. Opening Date	05-08-2009
A/c. Status	A Active	A/c. Status Date	01-08-2019
Purge Date	04-08-2009		
Address	K L N NAGAR BUDER ROAD VIJAYAWADA KRISHNA DT K L N NAGAR BUDER ROAD VIJAYAWADA KRISHNA DT		
City	VIJAY VIJAYAWADA	State	AP ANDHRA PRADESH
Country	IN INDIA	Postal Code	520007
Phone Type	CELLPH	Telex No.	
Phone No.	+919491017088		
Email ID Type			
Email ID			

8/9/23

General Ledger Date	Value Date	Instrument No.	Withdrawal Amt.	Deposit Amt.	Balance	Narrative
07-09-2023	07-09-2023			3,48,601.00 Cr	32,52,356.80 Cr	BY TFR 154111100000584
07-09-2023	07-09-2023			5,11,600.00 Cr	29,03,755.80 Cr	NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23250
06-09-2023	06-09-2023			2,87,100.00 Cr	23,92,155.80 Cr	BY TFR 154111100000584
05-09-2023	05-09-2023			4,79,804.00 Cr	21,05,055.80 Cr	BY TFR 154111100000584
05-09-2023	05-09-2023			2,075.00 Cr	16,25,251.80 Cr	NEFT:THE KRISHNA DISTRICT MILK PRODUCERS AXISP0042
05-09-2023	29-08-2023			82,510.00 Cr	16,23,176.80 Cr	06061I13R2304510CRE001
05-09-2023	05-09-2023		738.52 Dr		15,40,666.80 Cr	06061I13R2304510CRE001
05-09-2023	05-09-2023			5,00,000.00 Cr	15,41,405.32 Cr	BY CASH
05-09-2023	05-09-2023			8,72,450.00 Cr	10,41,405.32 Cr	NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23248
04-09-2023	04-09-2023			1,29,000.00 Cr	1,68,955.32 Cr	BY TFR 154111100000584
04-09-2023	04-09-2023	02005175	20,00,000.00 Dr		39,955.32 Cr	303867

Dhanekula Institute of Engineering & Technology

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E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

Dr. Ravi Kadiyala
B.Tech. M.E., Ph.D.
Principal

Ref: DHANIE&T/DRONIX COE/Bill/8

02/09/2023

Invoice

Bill To
OPTRONICS ENGINEERING LTD.
327, MAIN STREET SHEFAYIM 6099000
ISRAEL.

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Implementing the Super-Resolution using Generative Adversarial Networks (GANs)	No. of hours: 63	09-Sep-2023
No. of Hours	**DESCRIPTION**	**UNIT PRICE (Dollars per hour)**	**Amount**
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items 1. **Implementing the Final Utility Scripts**	8	$500

Sub Total	$500.00
Others	$00.00
Total	$500.00

02/9/23
Principal Investigator
(Dr. K. Sandeep)

Principal, DIET
Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

Enclosures:

1. Account Details

Finacle

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Menu | Show Memo Pad | CCY Converter

21 September, 2023 | User [redacted] | 15411 | Menu Shortcut: Go

Transaction Inquiry

Help

A/c. ID	154111100000043	**CCY/SOL ID**	INR/15411
A/c. Name	DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY		
General Ledger Subhead Code	10200	**Balance**	29,47,041.19 Cr
Opening Balance	19,47,825.80 Cr	**Closing Balance**	23,41,761.19 Cr
Float Balance	0.00 Cr	**Funds in Clearing**	0.00 Cr
Available Amt.	29,47,041.19 Cr	**Effective Available Amt.**	29,47,041.19 Cr
Customer Status	999 OTHERS	**A/c. Opening Date**	05-08-2009
A/c. Status	A Active	**A/c. Status Date**	01-08-2019
Purge Date	04-08-2009		
Address	K L N NAGAR BUDER ROAD VIJAYAWADA KRISHNA DT K L N NAGAR BUDER ROAD VIJAYAWADA KRISHNA DT		
City	VIJAY VIJAYAWADA	**State**	AP ANDHRA PRADESH
Country	IN INDIA	**Postal Code**	520007
Phone Type	CELLPH	**Telex No.**	
Phone No.	+919491017088		
Email ID Type			
Email ID			

21/9/23

General Ledger Date	Value Date	Instrument No.	Withdrawal Amt.	Deposit Amt.	Balance	Narrative
20-09-2023	20-09-2023			40,785.39 Cr	23,41,761.19 Cr	06061I13R2308862CRE001
20-09-2023	20-09-2023			3,53,150.00 Cr	23,00,975.80 Cr	NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23263

OK

Dhanekula Institute of Engineering & Technology

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Dr. Ravi Kadiyala

B.Tech. M.E., Ph.D.

Principal

Ref: DHAN/IE&T/DRONIX COE/Bill/9

03/10/2023

Invoice

Bill To

OPTRONICS ENGINEERING LTD.
327, MAIN STREET SHEFAYIM 6099000
ISRAEL.

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Implementing the Super-Resolution using Generative Adversarial Networks (GANs)	No. of hours: 63	10-Oct-2023
No. of Hours	**DESCRIPTION**	**UNIT PRICE (Dollars per hour)**	**Amount**
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items 1. **Implementing the Final Utility Scripts**	8	$500

Sub Total	$500.00
Others	$00.00
Total	$500.00

3/10/23

Principal Investigator
(Dr. K. Sandeep)

Principal, DIET

Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

Transaction Inquiry

A/c. ID	154111100000043	CCY/SOL ID	INR/15411
A/c. Name	DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY		
General Ledger Subhead Code	10200		
Opening Balance	2,37,202.43 Cr	Balance	15,09,731.81 Cr
Float Balance	0.00 Cr	Closing Balance	12,11,692.81 Cr
Available Amt.	15,09,731.81 Cr	Funds in Clearing	0.00 Cr
Customer Status	999 OTHERS	Effective Available Amt.	15,09,731.81 Cr
A/c. Status	A Active	A/c. Opening Date	05-08-2009
Purge Date	04-08-2009	A/c. Status Date	01-08-2019
Address	K L N NAGAR BUDER ROAD VIJAYAWADA KRISHNA DT		
	K L N NAGAR BUDER ROAD VIJAYAWADA KRISHNA DT		
City	VIJAY VIJAYAWADA		
Country	IN INDIA	State	AP ANDHRA PRADESH
Phone Type	CELLPH	Postal Code	520007
Phone No.	+919491017088	Telex No.	
Email ID Type			
Email ID			

General Ledger Date	Value Date	Instrument No.	Withdrawal Amt.	Deposit Amt.	Balance	Narrative
18-10-2023	18-10-2023			40,790.38 Cr	12,11,692.81 Cr	060611I13R2322067CRE001
18-10-2023	18-10-2023			9,33,700.00 Cr	11,70,902.43 Cr	NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23291

OK

19.10.23

Dhanekula Institute of Engineering & Technology

(AUTONOMOUS)

(Approved by AICTE, Permanently Affiliated to JNTU, Kakinada)

An ISO 9001- 2015 Certified Institution

Ganguru, Vijayawada - 521 139, Ph. : 8333924842, 8333924843, 9441675588, Mob. : 9491017088

E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

Ref: DHAN/IE&T/DRONIX COE/Bill/10

02/11/2023

Invoice

Bill To

OPTRONICS ENGINEERING LTD.
327, MAIN STREET SHEFAYIM 6099000
ISRAEL.

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Creating the Inference Script for the Super-Resolution using Generative Adversarial Networks (SRGANs)	No. of hours: 63	10-Nov-2023
No. of Hours	**DESCRIPTION**	**UNIT PRICE (Dollars per hour)**	**Amount**
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items 1. **Creating the Inference Script for the SRGAN**	8	$500

Sub Total	$500.00
Others	$00.00
Total	$500.00

02/11/23

Principal Investigator
(Dr. K. Sandeep)

Principal, DIET

Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

Enclosures:

1. Account Details

Finacle

Universal Banking Solution from Infosys

Menu | Show Memo Pad | Background Menu | CCY Converter

22 November, 2023 | User DP706026 | 15411 | Menu Shortcut: Go

Account Ledger Inquiry

Help

A/c. ID	154111100000043 INR 15411 DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY				
A/c. Status	ACTIVE		A/c. Status Date	01-08-2019	
A/c. Open Date	05-08-2009		A/c. Close Date		
GL Subhead	10200		A/c. Type	CUSTOMER ACCOUNT	
Opening Bal.	INR	22,78,714.60 CR.	Available Amt.	INR	12,40,454.89 CR.
Closing Bal.	INR	12,40,454.89 CR.	Effective Available Amt.	INR	12,40,454.89 CR.
Funds in Clg.	INR	0.00 CR.	Float Bal.	INR	0.00 CR.

Page 1 of 1

Tran. Date	Value Date	Instr. No.	Particulars	CCY	Debit Amt.	Credit Amt.	Bal.
22-11-2023	22-11-2023		NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23326	INR		67,900.00	12,40,454.89CR.
21-11-2023	21-11-2023	Drone	06061I13R23A7052CRE001	INR		40,840.29	11,72,554.89CR.
21-11-2023	21-11-2023	02005872	RTGSO-DIET UBINH23325880298	INR	15,00,000.00		11,31,714.60CR.
21-11-2023	21-11-2023		NEFT:DHANEKULA INSTITUTE OF ENGINEERING ICICO23325	INR		3,53,000.00	26,31,714.60CR.

OK

GANGURU BR. 15411 Krishna Dist. UNION BANK OF INDIA

Dhanekula Institute of Engineering & Technology

(AUTONOMOUS)

(Approved by AICTE, Permanently Affiliated to JNTU, Kakinada)

An ISO 9001- 2015 Certified Institution

Ganguru, Vijayawada - 521 139, Ph. : 8333924842, 8333924843, 9441675588, Mob. : 9491017088

E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

Ref: DHAN/IE&T/DRONIX COE/Bill/11

02/12/2023

Invoice

Bill To

OPTRONICS ENGINEERING LTD.
327, MAIN STREET SHEFAYIM 6099000
ISRAEL.

CONSULTANT	JOB	PAYMENT TERMS	DUE DATE
DIET	Training and Visualizations of the Super-Resolution using Generative Adversarial Networks (SRGANs)	No. of hours: 63	10-Dec-2023
No. of Hours	**DESCRIPTION**	**UNIT PRICE (Dollars per hour)**	**Amount**
63	The aim of this project is to build a model that can enhance the resolution of low-resolution images using generative adversarial networks (GANs). For doing above project below are the items 1. **Training and Visualizations of the SRGAN using Inference Script**	8	$500

Sub Total	$500.00
Others	$00.00
Total	$500.00

02/12/23

Principal Investigator
(Dr. K. Sandeep)

Enclosures: 1. Account Details

DIET

Principal, DIET
Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

נגישות

נכון ל16/02/23 13:30

תשלום בסוויפט

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##PAGE##

15.02.23   :תאריך                                          לכבוד
                                                      סניף 832 פנקס
                                                            עבור:
                                                אופטרוניקס הנדסה בע"מ
                                                60990 שפיים מיקוד 327

645-05-2404302MQ
645-05-2404302MQ              ---------------------------

103 02       CURR + AMT : USD500,00

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S  E  N  D  E  R :
BANK L, MERCAZ , PARK, NORTH INDUSTRIAL AREA LOD
R E C E I V E R  :

CHASUS33XXX
* JPMORGAN CHASE BANK, N.A.
* 383 MADISON AVENUE
* NEW YORK
* U.S.A.
:20:  TRANSACTION REFERENCE NUMBER:              DATE: 230215
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:32A: VALUE DATE, CURRENCY CODE, AMOUNT:
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                              OPTRONICS ENGINEERING LTD.
                              327 MAIN ST.
                              SHEFAYIM 60990
                              ISRAEL
:56A: INTERMEDIARY BANK     :
                              SCBLUS33XXX

                              STANDARD CHARTERED BANK
                              1 MADISON AVENUE
                              NEW YORK, NY.10010-3603
                              USA

:57A: 'ACCOUNT WITH BANK':
                              UBININBBXXX

                              UNION BANK OF INDIA
                              INTERNATIONAL SERVICE BRANCH
```

נגישות

239 VIDHAN BHAVAN MARG, NA
MUMBAI 400021, INDIA

:59: BENEFICIARY CUSTOMER :
154111100000043/
DHANEKULA INSTITUTE OF ENGINEERING
AND TECHNOLOGY
GANGURU, VIJAWADA
INDIA
:70: DETAILS OF PAYMENT :
IN DATED 29/1/23 FEF DRONIX
P0108
:71A: DETAILS OF CHARGES :
OUR
:72: SENDER TO RECEIVER INFORMATION:
/FND/
/ACC/
// UNION BANK OF INDIA
// IFSC CODE UBIN0815411
// ANDHRA PRADESH PIN 521139
// MUMBAI 400021, INDIA

* 05 * MT103 -- ISS 000 -- RIKI LEVI

נגישות
נכון ל-01/03/23 11:34

תשלום בסוויפט

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##PAGE##

01.03.23   :תאריך                                          לכבוד
                                                      סניף 832 פנקס
                                                            עבור:
                                                אופטרוניקס הנדסה בע"מ
                                                60990 שפיים מיקוד 327

645-05-2534699MQ
645-05-2534699MQ              ---------------------------

103 02       CURR + AMT : USD500,00

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BANK L, MERCAZ , PARK, NORTH INDUSTRIAL AREA LOD
R E C E I V E R  :

CHASUS33XXX
* JPMORGAN CHASE BANK, N.A.
* 383 MADISON AVENUE
* NEW YORK
* U.S.A.
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                              OPTRONICS ENGINEERING LTD.
                              327 MAIN ST.
                              SHEFAYIM 60990
                              ISRAEL
:56A: INTERMEDIARY BANK     :
                              SCBLUS33XXX

                              STANDARD CHARTERED BANK
                              1 MADISON AVENUE
                              NEW YORK, NY.10010-3603
                              USA

:57A: 'ACCOUNT WITH' BANK   :
                              UBININBBXXX

                              UNION BANK OF INDIA
                              INTERNATIONAL SERVICE BRANCH
```

נגישות

239 VIDHAN BHAVAN MARG, NA
MUMBAI 400021, INDIA

:59: BENEFICIARY CUSTOMER :
154111100000043/
DHANEKULA INSTITUTE OF ENGINEERING
AND TECHNOLOGY
GANGURU, VIJAWADA
:70: DETAILS OF PAYMENT :
IN DATED 27.2.23 REF DRONIX
:71A: DETAILS OF CHARGES :
OUR
:72: SENDER TO RECEIVER INFORMATION:
/FND/

* DRR = DHAINSUS * 05 * MT103 -- ISS 000 -- UNKNOWN

Dhanekula Institute of Engineering & Technology

(Approved by AICTE, Permanently Affiliated to JNTU, Kakinada)

An ISO 9001- 2015 Certified Institution

Ganguru, Vijayawada - 521 139, Ph. : 8333924842, 8333924843, 9441675588, Mob. : 9491017088

E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

Ref: DHAN/IE&T/R&D Centre/Est/02

Date: 18-04-2023

To
Optronics Engineering Ltd
Israel

Dear Sir,

Sub : Drone R&D Centre – Request for release of payment of Rupees **269698/-- Reg.**
Ref : 1) Purchase of Hand Tools and consumables required towards operation of Drone R&D center at Dhanekula Institute of Engineering & Technology.
2) Your mail dated December 12th 2022 intimating us to procure the tools and consumables required for regular operations of R & D center.

***

With reference to the subject and reference cited above, we wish to bring to your kind notice that Dhanekula Institute of Engineering & Technology has procured all the hand tools and consumables as required for regular operations at R&D center to be inaugurated on 03-05-2023 in Collaboration with you and we are extremely happy to associate with you.

DIET proudly announce that honorable governor of Andhra Pradesh Shri **S ABDUL NAZEER** accepted our request to inaugurate Drone R&D (DRONIX) center on May 03, 2023. All the works are going as planned earlier.

Here with we are presenting you the expenditure incurred towards procurement as in reference 2 with a request to kindly reimburse the amount spent by the DIET (**269698/- INR**) for which the bills are communicated earlier by Mr. G Vignesh Krishna.

I hope the amount will be credited to the below mentioned account at the earliest.

Bank Account Name.	Dhanekula Institute of Engineering & Technology
Bank Name & Address	Union Bank of India, KDAO, Ganguru, Vijayawada, Andhra Pradesh, India, Pin: 521139
Account Number	154111100000043
IFSC Code	UBIN0815411

Details of the equipment and respective costs were attached to this letter.

Thanking you

DIET

18/4/2023

Dr Ravi Kadiyala
PRINCIPAL

Principal
Dhanekula Institute of Engineering and Technology
Ganguru, VIJAYAWADA-521 139

DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY :: GANGURU

Details of the equipment purchased locally for R&D Centre at DIET by DRONIX

S. No	Material Name	Invoice Num	Quantity	Total Cost
1	Hot Blower	GE/22-23/6027	5	14500
2	Measuring tape	GE/22-23/6027	10	1475
3	Vice	GE/22-23/6027	5	4228
4	Small hammer	GE/22-23/6027	3	1593
5	Hot Glue Gun	382	5	1300
6	Safety googles	GE/22-23/6027	2	425
7	Safety gloves	GE/22-23/6027	2	177
8	Small Scales	932	1	531
9	Tweezers	GE/22-23/6027	5	148
10	Screws (M4 8mm)	1121	500	2065
11	Screws (M4 16mm)	1121	500	2065
12	Multi meter	510	3	2230
13	Isopropyl Alcohol (IPA)	101/22-23	2.5 Liters	3328
14	Table Drilling Machine	GE/22-23/6027	1	15104
15	Laptop	21-23	1	71000
16	Printer	21-23	1	19500
17	Magnifying Lamp	IN-36667	3	2817
18	Screwdriver Set	QSBP-62087	5	3245
19	Glues set	IN-7325	5	1875
20	Insulation Remover	QSBP-62087	5	2745
21	Wrench	1.TPSL-18941 2. TWQJ-53334 3. TPSL-18137	4	3549
22	3Dfilaments (PLA)	1.QWQE-15957 2. QWQE-15346	10	14454
23	3Dfilaments (PETG)	IN-4100	10	12197
24	3Dfilaments (TPU)	1. IN-4100 TZBZ-4668	10	17049
25	Ca Glues	1. IN-16471 IN-17789	5	15498
26	Epoxy 5Min	IN-1388	2	454
27	3m VHB	IN-34966	5	14760
28	Masking Tape	CJB1-1258	5	1124
29	Lock Tite	IN-108	5	2600
30	Hand Saw	RWCS-8807	3	1220
31	Dremel	TNGP-20122	1	1999
32	Drill Bits	MAA4-435396	1	872
33	Hexagon Nylon Insert Self Lock Nut M2	INV/22-23/130184	500	1466
34	Grinding Machine	PNQ3-308642	1	5119
35	Air spray for PCBs	DEL5-12851	3	1482
36	Table Fan Crompton High Flo Neo High Speed 400 mm (16 inch) 50W	H-9020	1	2950
Total Amount on Indian Rupees				269698-00

DHANEKULA INSTITUTE OF ENGINEERING AND TECHNOLOGY ★ DIET ★ GANGURU-521 139

Ravi Kadiyala
Principal

Principal
Dhanekula Institute of Engineering and Technology
Ganguru, VIJAYAWADA-521 139

לכבוד אופטרוניקס הנדסה בע"מ
כתובת: ת.ד. 00327 שפיים
מס' חשבון: 0093668939
מס' חשבון קודם: 0-00-047981

סניף הרצליה פיתוח 146
כתובת: קדושי השואה
טלפון: 0768051750 **פקס:** 0768890146
צוות: עסקי **טל":** 0768051765 0768051766 0768051767 0768051768
מ.עסקים: **טל":**

Swift

##PAGE##

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SWIFT - DEST : ICICINBB 2 = NORMAL
* DESTINATION: ICICI BANK LIMITED
* MAFATLAL CHAMBER LOWER PAREL (E)
* MUMBAI 400013
* INDIA

* 19 APRIL 2023

:20 : SENDER'S REFERENCE
484-06-7271346
:23B: BANK OPERATION CODE
CRED
:32A: VALUE DATE/ CURRENCY/ INTERBANK SETTLED AMOUNT
230420INR269698,
:33B: CURRENCY/ INSTRUCTED AMOUNT
INR269698,
:50K: ORDERING CUSTOMER
/14600047981
OPTRONICS ENGINEERING LTD.
4 HAMASGER ST.
RAANANA
43653 ISRAEL
:57A: ACCOUNT WITH INSTITUTION
UBININBB
* UNION BANK OF INDIA
* UNION BANK BHAVAN
* 239 VIDHAN BHAVAN MARG
* NARIMAN POINT, MUMBAI 400025, INDIA
:59 : BENEFICIARY CUSTOMER
/154111100000043
DHANEKULA INSTITUTE OF
ENGINEERING AND TECHNOLOGY
GANGURU
IN/ VIJAYAWADA 521
:71A: DETAILS OF CHARGES
OUR

##OS##
* PAGE 1 OUT OF 1 PAGE(S)   484-06-7271346   ISS000

Annexure-14

ULab Systems

ULAB SYSTEMS, INC.

CONSULTING AGREEMENT

This Consulting Agreement (this "***Agreement***") is made and entered into as of 01/06/2021 (the "the effective date") by and between uLab Systems, Inc., a Delaware corporation with its principal place of business at1820 Gateway Drive, Suite 300, San Mateo, C 94404 (the "***Company***"), and Dhanekula Institute of Engineering and Technology (DIET), an individual with his/her principal place of business at DIET, Ganguru village, PenamaluruMandalam, Andhra Pradesh 521139, India("***Consultant***") (each herein referred to individually as a "***Party***," or collectively as the "***Parties***").

The Company desires to retain Consultant as an independent contractor to perform consulting services for the Company, and Consultant is willing to perform such services, on the terms described below. In consideration of the mutual promises contained herein, the Parties agree as follows:

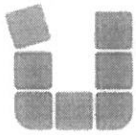
1. Services and Compensation

Consultant shall perform the services described in **Exhibit A** (the "***Services***") for the Company (or its designee), and the Company agrees to pay Consultant the compensation described in **Exhibit A** for Consultant's performance of the Services.

2. Confidentiality

A. ***Definition of Confidential Information.*** "***Confidential Information***" means any information (including any and all combinations of individual items of information) that relates to the actual or anticipated business and/or products, research or development of the Company, its affiliates or subsidiaries, or to the Company's, its affiliates' or subsidiaries' technical data, trade secrets, or know-how, including, but not limited to, research, product plans, or other information regarding the Company's, its affiliates' or subsidiaries' products or services and markets therefor, customer lists and customers (including, but not limited to, customers of the Company on whom Consultant called or with whom Consultant became acquainted during the term of this Agreement), software, developments, inventions, discoveries, ideas, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, finances, and other business information disclosed by the Company, its affiliates or subsidiaries, either directly or indirectly, in writing, orally or by drawings or inspection of premises, parts, equipment, or other property of Company, its affiliates or subsidiaries. Notwithstanding the foregoing, Confidential Information shall not include any such information which Consultant can establish (i) was publicly known or made generally available prior to the time of disclosure to Consultant; (ii) becomes publicly known or made generally available after disclosure to Consultant through no wrongful action or inaction of Consultant; or (iii) is in the rightful possession of Consultant, without confidentiality obligations, at the time of disclosure as shown by Consultant's then-contemporaneous written records; provided that any combination of individual items of information shall not be deemed to be within any of the foregoing exceptions merely because one or more of the individual items are within such exception, unless the combination as a whole is within such exception.

B. ***Nonuse and Nondisclosure.*** During and after the term of this Agreement, Consultant will hold in the strictest confidence, and take all reasonable precautions to prevent any unauthorized use or disclosure of Confidential Information, and Consultant will not (i) use the Confidential Information for any purpose whatsoever other than as necessary for the performance of the



Services on behalf of the Company, or (ii) disclose the Confidential Information to any third party without the prior written consent of an authorized representative of Company, except that Consultant may disclose Confidential Information to any third party on a need-to-know basis for the purposes of Consultant performing the Services; provided, however, that such third party is subject to written non-use and non-disclosure obligations at least as protective of Company and the Confidential Information as this Section 2. Consultant may also disclose Confidential Information to the extent compelled by applicable law; *provided however*, prior to such disclosure, Consultant shall provide prior written notice to Company and seek a protective order or such similar confidential protection as may be available under applicable law. Consultant agrees that no ownership of Confidential Information is conveyed to the Consultant. Without limiting the foregoing, Consultant shall not use or disclose any Company property, intellectual property rights, trade secrets or other proprietary know-how of the Company to invent, author, make, develop, design, or otherwise enable others to invent, author, make, develop, or design identical or substantially similar designs as those developed under this Agreement for any third party. Consultant agrees that Consultant's obligations under this Section 2.B shall continue after the termination of this Agreement.

C. ***Other Client Confidential Information.*** Consultant agrees that Consultant will not improperly use, disclose, or induce the Company to use any proprietary information or trade secrets of any former or concurrent employer of Consultant or other person or entity with which Consultant has an obligation to keep in confidence. Consultant also agrees that Consultant will not bring onto the Company's premises or transfer onto the Company's technology systems any unpublished document, proprietary information, or trade secrets belonging to any third party unless disclosure to, and use by, the Company has been consented to in writing by such third party.

D. ***Third Party Confidential Information.*** Consultant recognizes that the Company has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. Consultant agrees that at all times during the term of this Agreement and thereafter, Consultant owes the Company and such third parties a duty to hold all such confidential or proprietary information in the strictest confidence and not to use it or to disclose it to any person, firm, corporation, or other third party except as necessary in carrying out the Services for the Company consistent with the Company's agreement with such third party.

3. Ownership

A. ***Assignment of Inventions.*** Consultant agrees that all right, title, and interest in and to any copyrightable material, notes, records, drawings, designs, inventions, improvements, developments, discoveries, ideas and trade secrets conceived, discovered, authored, invented, developed or reduced to practice by Consultant, solely or in collaboration with others, during the term of this Agreement and arising out of, or in connection with, performing the Services under this Agreement and relating to treatment planning for clear aligner production, any copyrights, patents, trade secrets, mask work rights or other intellectual property rights relating to the foregoing (collectively, "***Inventions***"), are the sole property of the Company. Consultant also agrees to promptly make full written disclosure to the Company of any Inventions and to deliver and assign (or cause to be assigned) and hereby irrevocably assigns fully to the Company all right, title and interest in and to the Inventions.

B. ***Pre-Existing Materials.*** Subject to Section 3.A, Consultant will provide the Company with prior written notice if, in the course of performing the Services, Consultant incorporates

into any Invention or utilizes in the performance of the Services any invention, discovery, idea, original works of authorship, development, improvements, trade secret, concept, or other proprietary information or intellectual property right owned by Consultant or in which Consultant has an interest, prior to, or separate from, performing the Services under this Agreement ("***Prior Inventions***"), and the Company is hereby granted a nonexclusive, royalty-free, perpetual, irrevocable, transferable, worldwide license (with the right to grant and authorize sublicenses) to make, have made, use, import, offer for sale, sell, reproduce, distribute, modify, adapt, prepare derivative works of, display, perform, and otherwise exploit such Prior Inventions, without restriction, including, without limitation, as part of or in connection with such Invention, and to practice any method related thereto. Consultant will not incorporate any invention, discovery, idea, original works of authorship, development, improvements, trade secret, concept, or other proprietary information or intellectual property right owned by any third party into any Invention without Company's prior written permissionincluding without limitation any free software or open source software.

C. ***Moral Rights.***Any assignment to the Company of Inventions includes all rights of attribution, paternity, integrity, modification, disclosure and withdrawal, and any other rights throughout the world that may be known as or referred to as "moral rights," "artist's rights," "droit moral," or the like (collectively, "***Moral Rights***"). To the extent that Moral Rights cannot be assigned under applicable law, Consultant hereby waives and agrees not to enforce any and all Moral Rights, including, without limitation, any limitation on subsequent modification, to the extent permitted under applicable law.

D. ***Maintenance of Records.*** Consultant agrees to keep and maintain adequate, current, accurate, and authentic written records of all Inventions made by Consultant (solely or jointly with others) during the term of this Agreement, and for a period of three (3) years thereafter. The records will be in the form of notes, sketches, drawings, electronic files, reports, or any other format that is customary in the industry and/or otherwise specified by the Company. Such records are and remain the sole property of the Company at all times and upon Company's request, Consultant shall deliver (or cause to be delivered) the same.

E. ***Further Assurances.*** Consultant agrees to assist Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in Inventions in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments that the Company may deem necessary in order to apply for, register, obtain, maintain, defend, and enforce such rights, and in order to deliver, assign and convey to the Company, its successors, assigns and nominees the sole and exclusive right, title, and interest in and to all Inventions and testifying in a suit or other proceeding relating to such Inventions. Consultant further agrees that Consultant's obligations under this Section 3.E shall continue after the termination of this Agreement.

F. ***Attorney-in-Fact.*** Consultant agrees that, if the Company is unable because of Consultant's unavailability, dissolution, mental or physical incapacity, or for any other reason, to secure Consultant's signature with respect to any Inventions, including, without limitation, for the purpose of applying for or pursuing any application for any United States or foreign patents or mask work or copyright registrations covering the Inventions assigned to the Company in Section 3.A, then Consultant hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Consultant's agent and attorney-in-fact, to act for and on Consultant's behalf to execute and file any papers and oaths and to do all other lawfully permitted acts with respect to such Inventions to further the

prosecution and issuance of patents, copyright and mask work registrations with the same legal force and effect as if executed by Consultant. This power of attorney shall be deemed coupled with an interest, and shall be irrevocable.

4. Conflicting Obligations

Consultant represents and warrants that Consultant has no agreements, relationships, or commitments to any other person or entity that conflict with the provisions of this Agreement, Consultant's obligations to the Company under this Agreement, and/or Consultant's ability to perform the Services. Consultant will not enter into any such conflicting agreement during the term of this Agreement.

5. Return of Company Materials

Upon the termination of this Agreement, or upon Company's earlier request, Consultant will immediately deliver to the Company, and will not keep in Consultant's possession, recreate, or deliver to anyone else, any and all Company property, including, but not limited to, Confidential Information, tangible embodiments of the Inventions, all devices and equipment belonging to the Company, all electronically-stored information and passwords to access such property, those records maintained pursuant to Section 3.D and any reproductions of any of the foregoing items that Consultant may have in Consultant's possession or control.

6. Reports

Consultant agrees that Consultant will periodically keep the Company advised as to Consultant's progress in performing the Services under this Agreement. Consultant further agrees that Consultant will, as requested by the Company, prepare written reports with respect to such progress. The Company and Consultant agree that the reasonable time expended in preparing such written reports will be considered time devoted to the performance of the Services.

7. Term and Termination

A. ***Term.*** The term of this Agreement will begin on the Effective Date of this Agreement and will continue until the earlier of (i) final completion of the Services or (ii) termination as provided in Section 7.B.

B. ***Termination.*** The Parties may terminate this Agreement upon giving the other Party fourteen (14) days prior written notice of such termination pursuant to Section 13.G of this Agreement. The Parties may terminate this Agreement immediately and without prior notice if either Party refuses to or is unable to perform the Services or is in breach of any material provision of this Agreement.

C. ***Survival.*** Upon any termination, all rights and duties of the Company and Consultant toward each other shall cease except:

(1) The Company will pay, within thirty (30) days after the effective date of termination, all amounts owing to Consultant for Services completed and accepted by the Company prior to the termination date and related reimbursable expenses, if any, submitted in accordance with the Company's policies and in accordance with the provisions of Section 1 of this Agreement; and

(2) Section 2 (Confidentiality), Section 3 (Ownership), Section 4 (Conflicting Obligations), Section 5 (Return of Company Materials), Section 7 (Term and Termination), Section 8 (Independent Contractor; Benefits), Section 9 (Indemnification), Section **Error! Reference source not found.** (Nonsolicitation), Section 11 (Limitation of Liability), Section 12 (Arbitration and Equitable Relief), and Section 13 (Miscellaneous) will survive termination or expiration of this Agreement in accordance with their terms.

8. Independent Contractor; Benefits

A. ***Independent Contractor.*** It is the express intention of the Company and Consultant that Consultant perform the Services as an independent contractor to the Company. Nothing in this Agreement shall in any way be construed to constitute Consultant as an agent, employee or representative of the Company. Without limiting the generality of the foregoing, Consultant is not authorized to bind the Company to any liability or obligation or to represent that Consultant has any such authority. Consultant agrees to furnish (or reimburse the Company for) all tools and materials necessary to accomplish this Agreement and shall incur all expenses associated with performance, except as expressly provided in **Exhibit A**. Consultant acknowledges and agrees that Consultant is obligated to report as income all compensation received by Consultant pursuant to this Agreement. Consultant agrees to and acknowledges the obligation to pay all self-employment and other taxes on such income.

B. ***Benefits.*** The Company and Consultant agree that Consultant will receive no Company-sponsored benefits from the Company where benefits include, but are not limited to, paid vacation, sick leave, medical insurance and 401k participation. If Consultant is reclassified by a state or federal agency or court as the Company's employee, Consultant will become a reclassified employee and will receive no benefits from the Company, except those mandated by state or federal law, even if by the terms of the Company's benefit plans or programs of the Company in effect at the time of such reclassification, Consultant would otherwise be eligible for such benefits.

9. Indemnification

Consultant agrees to indemnify and hold harmless the Company and its affiliates and their directors, officers and employees from and against all taxes, losses, damages, liabilities, costs and expenses, including attorneys' fees and other legal expenses, arising directly or indirectly from or in connection with (i) any negligent, reckless or intentionally wrongful act of Consultant or Consultant's assistants, employees, contractors or agents, (ii) a determination by a court or agency that the Consultant is not an independent contractor, (iii) any breach by the Consultant or Consultant's assistants, employees, contractors or agents of any of the covenants contained in this Agreement and corresponding Confidential Information and Invention Assignment Agreement, (iv) any failure of Consultant to perform the Services in accordance with all applicable laws, rules and regulations, or (v) any violation or claimed violation of a third party's rights resulting in whole or in part from the Company's use of the Inventions or other deliverables of Consultant under this Agreement.

Company agrees to indemnify and hold harmless the Consultant and its affiliates and their directors, officers, agents and employees from and against all third party claims for losses, damages, liabilities, costs and expenses, including attorneys' fees and other legal expenses, arising directly or indirectly from or in connection with any violation or claimed violation of an actual or alleged infringement of the intellectual property rights of a third party under this Agreement.

10. No solicitation

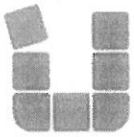
To the fullest extent permitted under applicable law, from the date of this Agreement until twelve (12) months after the termination of this Agreement for any reason (the "***Restricted Period***"), Consultant will not, without the Company's prior written consent, directly or indirectly, solicit any of the Company's employees to leave their employment, or attempt to solicit employees of the Company, either for Consultant or for any other person or entity. Consultant agrees that nothing in this Section **Error! Reference source not found.** shall affect Consultant's continuing obligations under this Agreement during and after this twelve (12) month period, including, without limitation, Consultant's obligations under Section 2.

11. Limitation of Liability

IN NO EVENT SHALL COMPANY BE LIABLE TO CONSULTANT OR TO ANY OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR DAMAGES FOR LOST PROFITS OR LOSS OF BUSINESS, HOWEVER CAUSED AND UNDER ANY THEORY OF LIABILITY, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHER THEORY OF LIABILITY, REGARDLESS OF WHETHER COMPANY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY. IN NO EVENT SHALL COMPANY'S LIABILITY ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT EXCEED THE AMOUNTS PAID BY COMPANY TO CONSULTANT UNDER THIS AGREEMENT FOR THE SERVICES, DELIVERABLES OR INVENTION GIVING RISE TO SUCH LIABILITY.

12. Arbitration and Equitable Relief

A. ***Arbitration.*** IN CONSIDERATION OF CONSULTANT'S CONSULTING RELATIONSHIP WITH COMPANY, ITS PROMISE TO ARBITRATE ALL DISPUTES RELATED TO CONSULTANT'S CONSULTING RELATIONSHIP WITH THE COMPANY AND CONSULTANT'S RECEIPT OF THE COMPENSATION AND OTHER BENEFITS PAID TO CONSULTANT BY COMPANY, AT PRESENT AND IN THE FUTURE, CONSULTANT AGREES THAT ANY AND ALL CONTROVERSIES, CLAIMS, OR DISPUTES WITH ANYONE (INCLUDING COMPANY AND ANY EMPLOYEE, OFFICER, DIRECTOR, SHAREHOLDER OR BENEFIT PLAN OF THE COMPANY IN THEIR CAPACITY AS SUCH OR OTHERWISE), ARISING OUT OF, RELATING TO, OR RESULTING FROM CONSULTANT'S CONSULTING OR OTHER RELATIONSHIP WITH THE COMPANY OR THE TERMINATION OF CONSULTANT'S CONSULTING OR OTHER RELATIONSHIP WITH THE COMPANY, INCLUDING ANY BREACH OF THIS AGREEMENT, SHALL BE SUBJECT TO BINDING ARBITRATION UNDER THE FEDERAL ARBITRATION ACT AND PURSUANT TO THE ARBITRATION PROVISIONS SET FORTH IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTIONS 1280 THROUGH 1294.2 (THE "***CCP ACT***") AND PURSUANT TO CALIFORNIA LAW, AND SHALL BE BROUGHT IN CONSULTANT'S INDIVIDUAL CAPACITY, AND NOT AS A PLAINTIFF, REPRESENTATIVE OR CLASS MEMBER IN ANY PURPORTED CLASS, COLLECTIVE OR REPRESENTATIVE PROCEEDING. NOTWITHSTANDING THE FOREGOING, CONSULTANT UNDERSTANDS THAT CONSULTANT MAY BRING A PROCEEDING AS A PRIVATE ATTORNEY GENERAL AS PERMITTED BY LAW. FOR THE AVOIDANCE OF DOUBT, THE FEDERAL ARBITRATION ACT GOVERNS THIS AGREEMENT AND SHALL CONTINUE TO APPLY WITH FULL FORCE AND EFFECT NOTWITHSTANDING THE APPLICATION OF PROCEDURAL RULES SET FORTH IN



THE CCP ACT AND CALIFORNIA LAW. **CONSULTANT AGREES TO ARBITRATE ANY AND ALL COMMON LAW AND/OR STATUTORY CLAIMS UNDER LOCAL, STATE, OR FEDERAL LAW, INCLUDING, BUT NOT LIMITED TO, CLAIMS UNDER TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, THE AMERICANS WITH DISABILITIES ACT OF 1990, THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967, THE OLDER WORKERS BENEFIT PROTECTION ACT, THE SARBANES-OXLEY ACT, THE WORKER ADJUSTMENT AND RETRAINING NOTIFICATION ACT, THE CALIFORNIA FAIR EMPLOYMENT AND HOUSING ACT, THE FAMILY AND MEDICAL LEAVE ACT, THE CALIFORNIA FAMILY RIGHTS ACT, THE CALIFORNIA LABOR CODE, CLAIMS RELATING TO EMPLOYMENT OR INDEPENDENT CONTRACTOR STATUS, CLASSIFICATION AND RELATIONSHIP WITH THE COMPANY, AND CLAIMS OF HARASSMENT, DISCRIMINATION, WRONGFUL TERMINATION, AND BREACH OF CONTRACT, EXCEPT AS PROHIBITED BY LAW.CONSULTANT ALSO AGREES TO ARBITRATE ANY AND ALL DISPUTES ARISING OUT OF OR RELATING TO THE INTERPRETATION OR APPLICATION OF THIS AGREEMENT TO ARBITRATE, BUT NOT TO DISPUTES ABOUT THE ENFORCEABILITY, REVOCABILITY OR VALIDITY OF THIS AGREEMENT TO ARBITRATE OR ANY PORTION HEREOF OR THE CLASS, COLLECTIVE AND REPRESENTATIVE PROCEEDING WAIVER HEREIN. WITH RESPECT TO ALL SUCH CLAIMS AND DISPUTES THAT CONSULTANT AGREES TO ARBITRATE, CONSULTANT HEREBY EXPRESSLY AGREES TO WAIVE, AND DOES WAIVE, ANY RIGHT TO A TRIAL BY JURY.** CONSULTANT FURTHER UNDERSTANDS THAT THIS AGREEMENT TO ARBITRATE ALSO APPLIES TO ANY DISPUTES THAT THE COMPANY MAY HAVE WITH CONSULTANT.

B. ***Procedure.*** CONSULTANT AGREES THAT ANY ARBITRATION WILL BE ADMINISTERED BY JUDICIAL ARBITRATION & MEDIATION SERVICES, INC. ("***JAMS***") PURSUANT TO ITS EMPLOYMENT ARBITRATION RULES & PROCEDURES (THE "***JAMS RULES***"), WHICH ARE AVAILABLE AT http://www.jamsadr.com/rules-employment-arbitration/ AND FROM HUMAN RESOURCES. CONSULTANT AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO DECIDE ANY MOTIONS BROUGHT BY ANY PARTY TO THE ARBITRATION, INCLUDING MOTIONS FOR SUMMARY JUDGMENT AND/OR ADJUDICATION AND MOTIONS TO DISMISS AND DEMURRERS APPLYING THE STANDARDS SET FORTH UNDER THE CALIFORNIA CODE OF CIVIL PROCEDURE. CONSULTANT AGREES THAT THE ARBITRATOR SHALL ISSUE A WRITTEN DECISION ON THE MERITS. CONSULTANT ALSO AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO AWARD ANY REMEDIES AVAILABLE UNDER APPLICABLE LAW, AND THAT THE ARBITRATOR SHALL AWARD ATTORNEYS' FEES AND COSTS TO THE PREVAILING PARTY WHERE PROVIDED BY APPLICABLE LAW. CONSULTANT AGREES THAT THE DECREE OR AWARD RENDERED BY THE ARBITRATOR MAY BE ENTERED AS A FINAL AND BINDING JUDGMENT IN ANY COURT HAVING JURISDICTION THEREOF.CONSULTANT AGREES THAT THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN ACCORDANCE WITH CALIFORNIA LAW, INCLUDING THE CALIFORNIA CODE OF CIVIL PROCEDURE AND THE CALIFORNIA EVIDENCE CODE, AND THAT THE ARBITRATOR SHALL APPLY SUBSTANTIVE AND PROCEDURAL CALIFORNIA LAW TO ANY DISPUTE OR CLAIM, WITHOUT REFERENCE TO RULES OF CONFLICT OF LAW. TO THE EXTENT THAT THE JAMS RULES CONFLICT WITH CALIFORNIA LAW, CALIFORNIA LAW SHALL TAKE PRECEDENCE. CONSULTANT FURTHER AGREES THAT ANY ARBITRATION UNDER THIS AGREEMENT SHALL BE CONDUCTED IN SANTA CLARA COUNTY, CALIFORNIA.

C. ***Remedy.*** EXCEPT AS PROVIDED BY THE CCP ACT AND THIS AGREEMENT, ARBITRATION SHALL BE THE SOLE, EXCLUSIVE, AND FINAL REMEDY FOR ANY DISPUTE BETWEEN CONSULTANT AND THE COMPANY. ACCORDINGLY, EXCEPT AS PROVIDED FOR BY THE CCP ACT AND THIS AGREEMENT, NEITHER CONSULTANT NOR THE COMPANY WILL BE PERMITTED TO PURSUE COURT ACTION REGARDING CLAIMS THAT ARE SUBJECT TO ARBITRATION.

D. ***Availability of Injunctive Relief.*** IN ACCORDANCE WITH RULE 1281.8 OF THE CALIFORNIA CODE OF CIVIL PROCEDURE, THE PARTIES AGREE THAT ANY PARTY MAY ALSO PETITION THE COURT FOR INJUNCTIVE RELIEF WHERE EITHER PARTY ALLEGES OR CLAIMS A VIOLATION OF ANY AGREEMENT REGARDING INTELLECTUAL PROPERTY, CONFIDENTIAL INFORMATION OR NONINTERFERENCE. IN THE EVENT EITHER PARTY SEEKS INJUNCTIVE RELIEF, THE PREVAILING PARTY SHALL BE ENTITLED TO RECOVER REASONABLE COSTS AND ATTORNEYS' FEES.

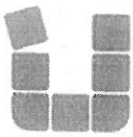
E. ***Administrative Relief.*** CONSULTANT UNDERSTANDS THAT EXCEPT AS PERMITTED BY LAW THIS AGREEMENT DOES NOT PROHIBIT CONSULTANT FROM PURSUING CERTAIN ADMINISTRATIVE CLAIMS WITH LOCAL, STATE OR FEDERAL ADMINISTRATIVE BODIES OR GOVERNMENT AGENCIES SUCH AS THE DEPARTMENT OF FAIR EMPLOYMENT AND HOUSING, THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION, THE NATIONAL LABOR RELATIONS BOARD, OR THE WORKERS' COMPENSATION BOARD. THIS AGREEMENT DOES, HOWEVER, PRECLUDE CONSULTANT FROM BRINGING ANY ALLEGED WAGE CLAIMS WITH THE DEPARTMENT OF LABOR STANDARDS ENFORCEMENT. LIKEWISE, THIS AGREEMENT DOES PRECLUDE CONSULTANT FROM PURSUING COURT ACTION REGARDING ANY ADMINISTRATIVE CLAIMS, EXCEPT AS PERMITTED BY LAW.

F. ***Voluntary Nature of Agreement.*** CONSULTANT ACKNOWLEDGES AND AGREES THAT HE/SHE IS EXECUTING THIS AGREEMENT VOLUNTARILY AND WITHOUT ANY DURESS OR UNDUE INFLUENCE BY THE COMPANY OR ANYONE ELSE. CONSULTANT FURTHER ACKNOWLEDGES AND AGREES THAT HE/SHE HAS CAREFULLY READ THIS AGREEMENT AND THAT CONSULTANT HAS ASKED ANY QUESTIONS NEEDED FOR CONSULTANT TO UNDERSTAND THE TERMS, CONSEQUENCES AND BINDING EFFECT OF THIS AGREEMENT AND FULLY UNDERSTAND IT, INCLUDING THAT ***CONSULTANT IS WAIVING HIS/HER RIGHT TO A JURY TRIAL.*** FINALLY, CONSULTANT AGREES THAT HE/SHE HAS BEEN PROVIDED AN OPPORTUNITY TO SEEK THE ADVICE OF AN ATTORNEY OF CONSULTANT'S CHOICE BEFORE SIGNING THIS AGREEMENT.

13. Miscellaneous

A. ***Governing Law; Consent to Personal Jurisdiction.*** This Agreement shall be governed by the laws of the State of California, without regard to the conflicts of law provisions of any jurisdiction. To the extent that any lawsuit is permitted under this Agreement, the Parties hereby expressly consent to the personal and exclusive jurisdiction and venue of the state and federal courts located in California.

B. ***Assignability.***This Agreement will be binding upon Consultant's heirs, executors, assigns, administrators, and other legal representatives, and will be for the benefit of the Company, its



successors, and its assigns. There are no intended third-party beneficiaries to this Agreement, except as expressly stated. Except as may otherwise be provided in this Agreement, Consultant may not sell, assign or delegate any rights or obligations under this Agreement. Notwithstanding anything to the contrary herein, Company may assign this Agreement and its rights and obligations under this Agreement to any successor to all or substantially all of Company's relevant assets, whether by merger, consolidation, reorganization, reincorporation, sale of assets or stock, change of control or otherwise.

C. ***Entire Agreement.*** This Agreement constitutes the entire agreement and understanding between the Parties with respect to the subject matter herein and supersedes all prior written and oral agreements, discussions, or representations between the Parties. Consultant represents and warrants that he/she is not relying on any statement or representation not contained in this Agreement. To the extent any terms set forth in any exhibit or schedule conflict with the terms set forth in this Agreement, the terms of this Agreement shall control unless otherwise expressly agreed by the Parties in such exhibit or schedule.

D. ***Headings.*** Headings are used in this Agreement for reference only and shall not be considered when interpreting this Agreement.

E. ***Severability.***If a court or other body of competent jurisdiction finds, or the Parties mutually believe, any provision of this Agreement, or portion thereof, to be invalid or unenforceable, such provision will be enforced to the maximum extent permissible so as to effect the intent of the Parties, and the remainder of this Agreement will continue in full force and effect.

F. ***Modification, Waiver.***No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in a writing signed by the Parties. Waiver by the Company of a breach of any provision of this Agreement will not operate as a waiver of any other or subsequent breach.

G. ***Notices.*** Any notice or other communication required or permitted by this Agreement to be given to a Party shall be in writing and shall be deemed given (i) if delivered personally or by commercial messenger or courier service, (ii) when sent by confirmed facsimile, or (iii) if mailed by U.S. registered or certified mail (return receipt requested), to the Party at the Party's address written below or at such other address as the Party may have previously specified by like notice. If by mail, delivery shall be deemed effective three business days after mailing in accordance with this Section 13.G.

(1) If to the Company, to:
1820 Gateway Drive, Suite 300,
San Mateo, C 94404
Attention: President & CEO

(2) If to Consultant, to the address for notice on the signature page to this Agreement or, if no such address is provided, to the last address of Consultant provided by Consultant to the Company.

H. ***Attorneys' Fees.*** In any court action at law or equity that is brought by one of the Parties to this Agreement to enforce or interpret the provisions of this Agreement, the prevailing Party will be entitled to reasonable attorneys' fees, in addition to any other relief to which that Party may be entitled.

I. ***Signatures.*** This Agreement may be signed in two counterparts, each of which shall be deemed an original, with the same force and effectiveness as though executed in a single document.

(signature page follows)

IN WITNESS WHEREOF, the Parties hereto have executed this Consulting Agreement as of the date first written above.

CONSULTANT

By: _____

Name: D.K.R.K Ravi Prasad

Title: Director, DIET

ULAB SYSTEMS, INC.

By: _____

Name: Charlie Wen

Title: President & CTO

Address for Notice:

Dhanekula Institute of Engineering & Technology,Ganguru,PenamaluruMandalam,Krishna District,Andhra Pradesh – 521139, India

ULAB SYSTEMS, 1820 Gateway Drive, Suite 300, San Mateo, CA 94404

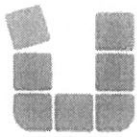


EXHIBIT A

SERVICES AND COMPENSATION

1. ***Contact.*** Consultant's principal Company contact:

   Name: D.K.R.K. Ravi Prasad

   Title: Director, DIET

   Email: dkrkp@gmail.com

   Phone:

2. ***Services***. The Services will include, but will not be limited to, the following:

A. DIET will provide consultancy services in the areas of image processing, 3d rendering, 3d registration, and other 3d applications as well as data-mining applications.

B. uLab and DIET will have discussions and agree upon scope of the projects.

C. DIET shall set aside 1000 sq.ft. of office space and shall be expandable to further requirements.

3. ***Compensation.***

   a. The Company shall pay the Consulting organizationfor the expenses incurred for providing the services.

   b. The Company shall reimburse Consultant, upon presentation of proper expense statements, for all authorized, ordinary and necessary out-of-pocket expenses reasonably incurred by Consultant in connection with the performance of his services pursuant to this Agreement.

   c. uLab shall pay DIET consultancy fee for the work done by professors and students at a fair market rate against the invoice raised by DIET.

   d. uLab shall provide needed hardware and software or DIET will buy required equipment per uLab's specifications and invoice uLab.

   e. Every month, Consultant shall submit to the Company a written invoice for Services and expenses, and such statement shall be subject to the approval of the contact person listed above or other designated agent of the Company. The Company will remit payment for

properly submitted and approved invoices within fifteen (15) days following invoice submission.

In order to help prevent adverse tax consequences to Consultant under Section 409A (as defined below), in no event will any payment under Section 3.A. of this Exhibit be made later than the later of (1) March 15th of the calendar year following the calendar year in which such payment was earned,or (2) the 15th day of the third (3rd) month following the end of the Company's fiscal year in which such payment was earned.

All payments and benefits provided for under this Agreement are intended to be exempt from or otherwise comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and guidance thereunder (together, "**Section 409A**") so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities or ambiguous terms herein will be interpreted to be exempt or so comply. Each payment and benefit payable under this Agreement is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

CONSULTANT

By: _____

Name: D.K.R.K Ravi Prasad

Title: Director, DIET

ULAB SYSTEMS, INC.

By: _____

Name: Charlie Wen

Title: President & CTO

ULab India Projects

Image based Case Estimate

Input:

Standard orthodontic images:

1. Occlusal lower and upper
2. Front Mouth Closed, Open (Upper and Lower slightly separated)
3. Left and Right Posteriors

Operation:

Mark critical features on photo:

1. K9 FACC
2. Midline shift if (necessary)
3. Posterior class discrepancy

Output:

Describe treatment goals:

1. Correct Midline
2. Overjet/Overbite
3. Class correction
4. Arch expansion, distalization
5. Tooth extraction

Estimate a rough treatment time, and steps, maybe a simulation

Treatment protocol analysis based on movie

Input:

Treatment simulation movie files
Patient initial teeth STL files (after separated to individual tooth with basises)
Tooth basis and features: FACC, edge, cusp etc

Operation:

Match/Superimpose STL with movie

Output:

Based on movies, calculate individual tooth per stage movement with the defined basis

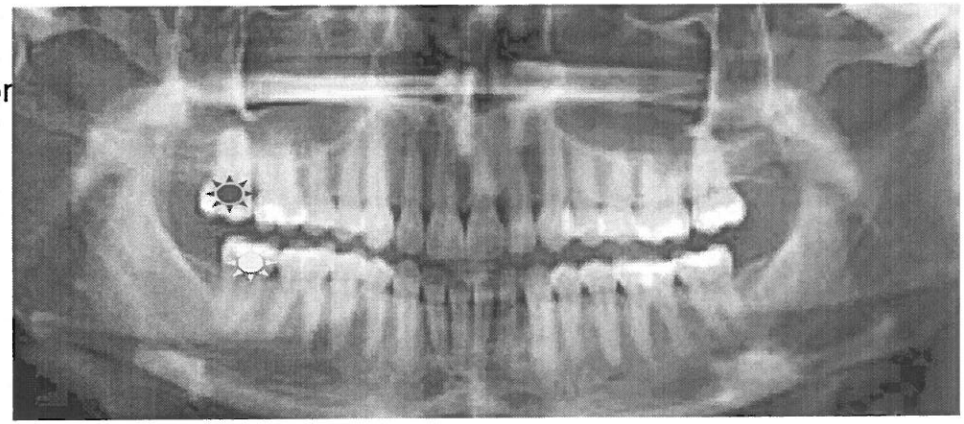
Root extraction from Pano

Input:

Patient pano image
Patient initial teeth STL files (after separated to individual tooth)
Tooth basis and features: FACC, edge, cusp etc

Operation:

Mark seed leftmost upper tooth
Mark seed leftmost lower tooth
Calc and display root outline with gaps no collisior
Adjust root and length if needed



Output:

Teeth STL files with roots
Mark triangles with crown and root flags

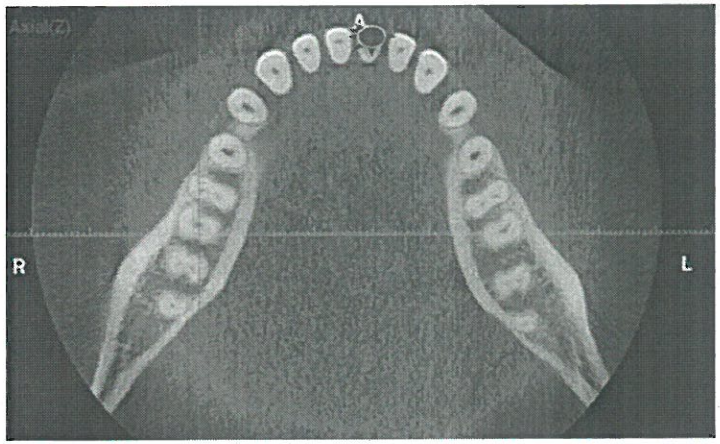
Root extraction and match on CBCT

Input:

Patient CBCT image
Patient initial teeth STL files (after separated to individual tooth)
Tooth basis and features: FACC, edge, cusp etc

Operation:

Mark and ID one tooth on upper
Mark and ID one tooth on lower
Match/Superimpose STL with CBCT (OP1)
Calc and display root with no collision
Adjust root and length if needed



Output:

Teeth STL files with roots
Mark triangles with crown and root flags
Trimmed CBCT data (surround the teeth)
If OP1 can be done quickly, have the option to output the Trimmed CBCT data with enough safe zone.

Auditor 2021-22

U LAB SYSTEMS

Ledger Account

(Sundry Creditors)

1-Apr-2021 to 31-Mar-2022

Date	Particulars	Vch Type	Debit	Credit
2-9-2021	By **(as per details)**	**Receipt**		70,425.00
	Btech IV Tution Fee Swd 2020-2021		2,56,200.00 Cr	
	BTECH III Tution Fee Swd 20-21		15,950.00 Cr	
	BTECH I TUTION FEE SWD 20-21		15,200.00 Cr	
	B.TECH TUTION FEE 4 TH YEAR 2020 - 21		95,800.00 Cr	
	BTECH TUTION FEE I ST 20-21		22,800.00 Cr	
	DIPLOMA III YEAR SWD 20-21		24,000.00 Cr	
	GIRLS HOSTEL FEE 20-21		5,500.00 Cr	
	DIPLOMA IIYEAR SWD 20-21		6,250.00 Cr	
	ANDHRA BANK GANGURU		5,12,125.00 Dr	
	BEING FEE RECIVED FROM STUDENTS THROUGH BANK			
				70,425.00
To	**Closing Balance**		70,425.00	
			70,425.00	**70,425.00**

02-09-2021 NEFT:RTGS FTU PAYLINK P32 TRANSIT AC CITIN21231135

70,424.94

UTR Number CITIN21231135994

Sender Account 0008429146

Sender IFSC CITI0100000

Sender Bank CITI BANK N.A

Sender Branch D N ROAD DNR

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DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

	Drawee Branch	UCO BANK	
02-09-2021	UPIAB/124553349786/CR/VEERLA N/BARB/9515976634@ybl		
6,250.00	17,60,316.68Cr		
02-09-2021	BY CASH 18352-EE-058		
24,000.00	17,84,316.68Cr		
02-09-2021	NEFT:RTGS FTU PAYLINK P32 TRANSIT AC CITIN21231135		
70,424.94	18,54,741.62Cr		
	UTR Number	CITIN21231135994	
	Sender Account	0008429146	
	Sender IFSC	CITI0100000	
	Sender Bank	CITI BANK N.A	
	Sender Branch	D N ROAD DNR	
02-09-2021	UPIAB/124534829406/CR/VEMPATI /SBIN/9490856237@ybl		
15,950.00	18,70,691.62Cr		
02-09-2021	UPIAB/124509616073/CR/ABDUL HA/HDFC/7337783388@ybl		
800.00	18,71,491.62Cr		
03-09-2021	BY CASH 178T1A0526		
15,950.00	18,87,441.62Cr		
03-09-2021	BY CASH 188T1A0587		
15,950.00	19,03,391.62Cr		
03-09-2021	BY CASH 178T1A0558		
16,000.00	19,19,391.62Cr		
03-09-2021	BY CASH 188T5A0134		
15,950.00	19,35,341.62Cr		
03-09-2021	BY CASH 188T5A0333		
35,000.00	19,70,341.62Cr		
03-09-2021	BY CASH 178T1A05B4		
15,950.00	19,86,291.62Cr		
03-09-2021	BY CASH 178T1A0533		
15,950.00	20,02,241.62Cr		
03-09-2021	Repayment After Renewal of [154120100045602]		
48,896.00	20,51,137.62Cr		
03-09-2021	Repayment After Renewal of [154120100045587]		
97,791.00	21,48,928.62Cr		
Cumulative Totals:			
11,66,52,356.00	11,88,01,284.62	21,48,928.62Cr	

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Ganguru, Vijayawada-521 139

A Report on ULab Systems Inc. Consultancy Project

Dhanekula Institute of Engineering & Technology has a Memorandum of Understanding (MOU) with ULab Systems Inc. USA on 24 Nov 2020. The Department of Computer Science & Engineering received four projects on Medical Image Processing.

Project-1: Root Extraction from Pano Image. (Annexure-I)

Project-2: Image Based Case Estimation.

Project-3: Treatment Protocol Analysis Based on Movie.

Project-4: Root Extraction and Match on CBCT image.

Under This Lab the Following Faculty Members and Students are trained to do the above mentioned project. The training was held in three phases.

PhaseI: Python Programming for 30 Hours.

Phase II: Image Processing with OpenCV for 15 Hours.

Phase III: Deep Learning in Image Processing for 30 Hours.

Table 1: List of Faculty.

S.No	Name of the Faculty	Designation	Department	Role in Project
1.	Dr. K. Prabhakar	Professor	CSE	Principal Investigator
2.	Dr. V. Sreenivas	Asso.Professor	CSE	Coordinator
3.	Dr. N. Satesh	Asso. Professor	ME	Technical Supervisor-2
4.	Mr. BhanuPrakesh	Asst. Professor	CSE	Technical Supervisor-1
5.	Mr. D. Ratna Kumar	System Admin.	CSE	Lab H/W Technician

Table 2: List of Students.

S.No	Name of the Student	Reg.No.	Department	Role in Project
1.	B. Navya	188T1A0506	CSE	Developer
2.	K. Geetardha	188T1A0582	CSE	Developer
3.	N. Jagadeesh	188T1A0596	CSE	Developer
4.	K. ManojSai	198T5A0509	CSE	Developer
5.	V. KeerthiAkshaya	198T1A0546	CSE	Developer
6.	K. Mani Saradhi	198T1A0556	CSE	Developer
7.	Md. Farheen	198T1A0569	CSE	Developer
8.	Sk. Sameer	198T1A05A1	CSE	Developer
9.	E. SaiTeja	198T1A0529	CSE	Developer

10.	S. Chaturya	198T1A05A7	CSE	Developer

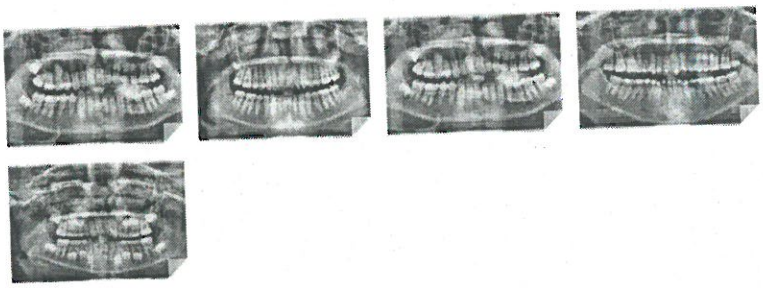
Project Status:

- ***Root Extraction from Pano Image*** *is Successfully Implemented.* *(Annexure-I)*
- *Currently implementing* ***Image Based Case Estimation.***

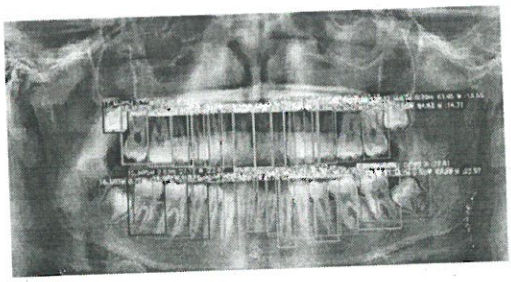
Annexure-I

The project is implemented with advances Machine Learning (ML) models as per the requirements of ULab systems and trained 25 pano images which are received from Ulab systems. The training held in two phases,

Phase I: In first phase five pano imagesshown in Fig. 1. are trainedand got the result as shown in Fig. 2.



Trained models in first phase



Output in first phase

Second Module

As per MOU with ULab Systems we have Successfully Completed first module and we have started the second module **Root Extraction and Match CBCT.**

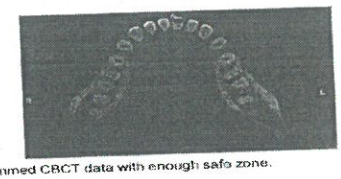
In this CBCT images and STL images will be given as Input and we need the operations as mark the ID for upper teeth and lower teeth and display the root with no collision and we need to train the inputs and apply the different machine learning algorithms to preprocess the

data and feature selection of the data. finally we will get the output as trimmed CBCT data. As we will get the 2D images, we need to convert the 2D images to the 3D images.

Root extraction and match on CBCT

Input:
- Patient CBCT image
- Patient initial teeth STL files (after separated to individual tooth)
- Tooth basis and features: FACC, edge, cusp etc

Operation
- Mark and ID one tooth on upper
- Mark and ID one tooth on lower
- Match/Superimpose STL with CBCT (OP1)
- Calc and display root with no collision
- Adjust root and length if needed



Output:
- Teeth STL files with roots
- Mark triangles with: crown and root flags
- Trimmed CBCT data (surround the teeth)
- If OP1 can be done quickly, have the option to output the Trimmed CBCT data with enough safe zone.

Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

Annexure-12

Technology Business Incubator

No.6/18/2018-KVI-I

GOVERNMENT OF INDIA

MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

(KVI-1 Section)

*****

Rafi Marg, Udyog Bhawan,
New Delhi-110001.

Dated the 20th February, 2020.

OFFICE MEMORANDUM

Subject: - Minutes of 11th Meeting of Scheme Steering Committee (SSC) of 'A Scheme for promotion of innovation ,Rural Industry & Entrepreneurship (ASPIRE)

The undersigned is directed to invite attention to the 11th Meeting of Scheme Steering Committee (SSC) of ASPIRE held on 31st January 2020 at 2.00 PM under the chairmanship of Secretary (MSME) at New Delhi

2. The Record Notes of the meeting are enclosed herewith for information and necessary action.

Encl: as above

(Vivek Mathur)
Under Secretary, Government of India
Tel No. 011-23063313
Email: vivek.mathur@nic.in

Encl: As above

To

1. The Secretary, D/o Agriculture & Cooperation, M/o Agriculture and Farmers Welfare, Krishi Bhawan, New Delhi.
2. The Secretary, M/o Food Processing Industry, Panchsheel Bhawan, August Kranti Marg, Khel Gaon, New Delhi.
3. The Secretary, M/o Rural Development, Krishi Bhawan, New Delhi.
4. The Secretary, D/o Electronics & Information Technology, M/o Communication and Information Technology, 6, CGO Complex, Electronics Niketan, New Delhi-110003.
5. The Secretary, M/o Labour & Employment, Shram Shakti Bhawan, Rafi Marg, New Delhi.
6. The Secretary, D/o Biotechnology, M/o Science & Technology, CGO Complex, Lodi Colony, New Delhi.
7. The Secretary, D/o of Industrial Policy & Promotion, M/o Commerce & Industry, Udyog Bhawan, New Delhi.
8. The Director General, CSIR, CSIR Bhawan, Rafi Marg, New Delhi.
9. Special Secretary & Financial Adviser, M/o MSME, Udyog Bhawan, New Delhi.

10. Special Secretary & Development Commissioner (MSME), Nirman Bhawan, New Delhi
11. Economic Adviser, M/o MSME, Udyog Bhawan, New Delhi.
12. Joint Secretary (SME), M/o MSME, Udyog Bhawan, New Delhi.
13. Chairman & Managing Director, NSIC, NSIC Bhawan, Okhla, New Delhi.
14. Chairman & Managing Director, SIDBI, 15, Ashok Marg, Lucknow – 226001.

Copy to:

1. Alternative Development Initiative with Rural Engagement Trust (ADIRE TRUST), Cuttack
2. D.P.Bhosale College ,Koregaon
3. Samarth Polytechnic (SP), Belhe
4. Krishna Engineering College, Ghaziabad
5. Aditya College Of Engineering & Technology, East Godavari
6. Dhanekula Institute Of Engineering & Technology (DIET), Vijayawada.
7. Sri Venkateswara College Of Engineering & Technology (SVCET), Chittoor
8. Malaviya Centre for Innovation ,Incubation & Entreprenuership –IIT (BHU), Varanasi
9. Sumathi Reddy Institute Of Technology For Women(SRITW), Warangal,
10. PDPM-IITDM Jabalpur,-Indian Institute of Information & Technology Design and Manufacturing, Jabalpur
11. S.R Innovation exchange (SRIX),Warangal
12. MITCON,Pune
13. Yeshwantrao Chavan College Of Engineering (YCCE),Nagpur
14. KVIC, Mumbai
15. Sanjay Gandhi Polytechnic (SGPT) , Amethi
16. Jamia Milia Islamia, New Delhi
17. NSIC, New Delhi

Copy also to:

1. PPS to Secretary (MSME)
2. PS to JS (ARI)
3. PS to DS (DN)
4. KVI(III) Section, M/o MSME (with the request to process fund release)

(Vivek Mathur)
Under Secretary

RECORD NOTES OF THE 11th MEETING OF SCHEME STEERING COMMITTEE (SSC) OF ASPIRE HELD ON 31st JANUARY 2020.

A meeting of the Scheme Steering Committee(SSC) of ASPIRE was held under the Chairmanship of Secretary (MSME) on 31st January 2020 in Samiksha Committee Room, Udyog Bhawan, New Delhi to consider the proposals under ASPIRE Scheme for setting up of LBIs and TBIs.

The list of participants is annexed.

2. Joint Secretary (ARI) welcomed the participants to the meeting. Deputy Secretary (ARI) gave a brief about the status of work done under the scheme so far. Subsequently, the agenda points were taken up for consideration.

3. Agenda Item-1: Confirmation of Minutes of the meeting held on 06.03.2019.

Minutes of the meeting held on 6.3.2019 were circulated and no comments were received. Therefore, the minutes of the meeting were confirmed.

4. Agenda Item-2: Action Taken Report on the minutes of the last meeting held on 06.03.2019.

There were no specific action points during the last meeting.

5. Agenda Item-3: Status of ASPIRE Scheme.

Status of ASPIRE Scheme was presented in the meeting and noted by the Committee.

6. Agenda Item-4: To consider Livelihood Business Incubator (LBI) / Technology Business Incubator(TBI).

The below-mentioned proposals were considered by the Committee and the following decisions were taken:

S.N	***Incubator Type***	***District & State***	***Host Organization***	***Thrust Area/Focus Activities***	***Proposed Cost of P &M***	***Committee's decision***
1	LBI-PPP	Cuttack, Odisha	Alternative Development Initiative with Rural Engagement Trust (ADIRE TRUST) in PPP mode with Mo MSME-DI	-Model Smart Villages using cleantech and IT services as alternative to conventional model cities with focus on two concepts:- -Harnessing the natural resources -Developing &	₹ 150 L	As this is a LBI to be set up by private organization in PPP mode with MSME Development Institute, Cuttack they are eligible for grant of Rs.50 lakh, the Committee **decided to approve the proposal with assistance of Rs.50 L.**

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				modernizing the local skills.		
2	LBI-PPP	East Godavari, Andhra Pradesh	Aditya College Of Engineering & Technology	Food processing Industry	₹ 102L	A.O made the presentation about various courses proposed in the LBI by it and mentioned that they will be able to train about 1000 persons every year. The LBI is to be set up by private organization in PPP mode with Andhra Pradesh Food Processing Society (Govt. of AP Enterprise) they are eligible for grant of Rs.50 lakh, **the committee decided to approve the proposal with assistance of Rs.50 lakh.**
3	TBI-New	Satara, Maharashtra	D.P.Bhosale College, Koregaon	-Micronutrient fertilizer development -Soil and Water analysis, Tissue culture -Ginger and Sugar cane based products -Gluten free Wheat flour and Millet processing -Spice Masala and advanced packaging. -Dehydration of Green Vegetables -Increasing shelf life of Milk and Milk products.	₹ 62.8L	The Committee decided that a revised proposal, after reworking of financials, may be submitted to the Ministry for reconsideration. Further it also noted that the AO is not registered on NGO Darpan portal. Therefore the proposal was **deferred** .
4	TBI-New	Pune, Maharashtra	Samarth Polytechnic (SP), Belhe	– Precision/Smart Agriculture - Innovative Food Technology - Supply Chain	₹ 188 L	It was noted that AO is not registered on NGO Darpan portal. The AO presented the proposal and it was noted that

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				Technology - Soil, Water and Weather Technology - ICT and IoT in Agriculture - Post-harvest Technology - Farm Fresh Retail - Farm Mechanization - Pest Management - Soil Management - Crop Monitoring		projected recurring cost is very high. It was decided that a team consisting of M/o MSME, CSIR, ICAR needs to visit the AO to assess their capability and that there is need of physical verification of proposed Machinery and Equipment. The proposal was **deferred.**
5	TBI-New	Ghaziabad, Uttar Pradesh	Krishna Engineering College	- IT Application in Healthcare Technologies, Retail Technologies & Cloud Computing - Mechatronics in Automotive Industry - Renewable Energy - Renewable Energy & Environmental Sustainability - Water, Sanitation & Solid Waste Management - Urban Transportation System - Waste Minimization - Modeling, Simulation & Optimization - Sustainability of Agro-food & Use of AI & ML - Electrical & Electronics	₹ 215 L	It was decided that a team consisting of M/o MSME, CSIR, ICAR needs to visit the AO for asses their capability and proposed Machinery and Equipment. The proposal was **deferred.**
6	TBI-New	Vijayawada, Andhra Pradesh	Dhanekula Institute Of Engineering & Technology (DIET)	-PCB Design & Fabrication -IOT based atmospheric water supply system. -Automatic water management system;	₹ 37.5 L	It was noted that the proposed focus areas PCB Design and Fabrication, IOT based atmospheric water supply system, Automatic water management system,

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				-drone sprayer - Smart & versatile cleaner with IOT applications.		Drone sprayer, Smart and versatile cleaner with IOT applications were unique and appeared beneficial for the rural areas. **Therefore, the committee decided to approve the proposal with assistance of Rs.18.75 lakh.**
7	TBI-New	Chittoor Andhra Pradesh	Sri Venkateswara College Of Engineering & Technology (SVCET)	-IOT in production (nutrient monitoring) & harvest(food processing enhancement and dynamic market forecast).	₹ 79.8 L	It was noted that the proposed focus areas viz. Nutrient monitoring, Water Administration System, Food Processing Enhancement and Dynamic Market Forecast with the help of IOT were new concepts, the committee decided **to approve the proposal with assistance of Rs.39.98 lakh.**
8	TBI-Existing	Varanasi, Uttar Pradesh	Malaviya Centre for Innovation, Incubation & Entreprenuership-IIT(BHU)	-Agriculture & agri business - Social Entrepreneurship - Education and Skill Development - Renewable energy - Food Security business - IoT and ICT	₹ 65 L	It was noted that the proposed focus areas viz. Agriculture and Agri business, Social Entrepreneurship, Renewable Energy, Food Security business were suitable for rural and agro space. **Since this is an existing TBI, the proposal was approved with assistance of Rs.30 lakh.**
9	TBI-New	Warangal, Telangana	Sumathi Reddy Institute Of Technology For Women (SRITW)	Three focus area:- -Agriculture -tourism -Health Fitness	₹ 97.6 L	It was noted that the focus was on limited number of areas with high potential. **It was decided to approve the proposal with assistance of Rs.48.80**

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						lakh.
10	TBI-Existing	Warangal, Telenga na	S.R Innovation exchange (SRIX)	Three focus area:- -Agriculture -IOT -Cleantech	₹ 62 L	It was noted that the focus was on limited areas viz. Agriculture, IOT, Clean tech which are the need of the current times. **Since this is an existing TBI, the proposal was approved with assistance of Rs.30 lakh.**

6.A The proposal of PDPM-IITDM, Jabalpur was not presented.

7. Agenda Item-5: Intimation/Approval of Local Screening–cum-Expert Committee (LSEC) of MITCON.

i. A request has been received from MITCON for reconstituting their Local Screening–cum-Expert Committee (LSEC) for selection of ideas /Incubates wherein the screening committee of at least 5 members including two members from the institution, two external experts from the domain of R & D, technology development & commercialization etc to be approved by the SSC as stated under the general guidelines of ASPIRE in para-10(iii).

ii. MITCON is an existing approved TBI under the scheme. Their earlier Local Screening–cum-Expert Committee (LSEC) was approved by SSC in its 3rd meeting held on 08.07.2016.

iii. The list of the new proposed committee members as follows:

S. No.	Name	Designation
1	Mr. Chandrashekhar Bhosale	Member Secretary-Head of TBI
2	Mr. Nitin Mali	Member from Institution
3	Dr. Abhay Hake	Member from Institution & financial Expert
4	Dr. Vishal Dawkar	External Expert from domain of R & D
5	Dr. Shubhangi Umbarkar	External Expert from domain of R & D
6	Dr. Atul Dadhe	Successful Entrepreneur

Reconstitution of LSEC of MITCON was approved by the Committee.

8. Agenda Item-6: Ratification of modifications in the approved list of Plant & Machinery in r/o TBI at "Yeshwantrao Chavan College of Engineering (YCCE)", Nagpur.

A project proposal from "Yeshwantrao Chavan College of Engineering (YCCE)", Hinga Road, Wanadongri, Nagpur for setting up of New Technology Business Incubator (TBI) Centre under ASPIRE scheme of the Ministry was presented and approved in the 9th Meeting of Scheme Steering Committee (SSC) of ASPIRE held on 1st August 2018, with a financial assistance is Rs.29.99 lakh which is 50% of Rs.59.99 lakh sought under the head 'Plant & Machinery' by applicant

20.2.20

organisation. Later YCCE modified the list of 'Plant & Machinery' submitted in the proposal and had requested the Ministry to approve the modified list.

In view of evaluation by IGTR, the committee approved the change of machinery by YCCE.

9. Agenda Item-7: Request of KVIC for change of location of two LBIs.

KVIC had proposed to set up 'Handmade Paper Livelihood Business Incubator' under ASPIRE Scheme at following five locations:

1) Dr. B.R. Ambedkar Institute of Rural Technology and Management, Nashik;
2) Central Palmgur and Palm Products Institute, Chennai; and
3) Dr. Rajendra Prasad Multi-Disciplinary Training Centre, Patna
4) Multi-Disciplinary Training Centre, New Delhi;
5) Kumarappa National Hand Paper Institute, Jaipur

These were approved in the 10th Meeting of SSC on 6.3.2019. KVIC has now submitted that setting up of LBI's at two locations would be difficult and has proposed change of place for these two locations as below:

Sl. No.	Original Proposal	Proposed change of place by KVIC	Reasons for seeking change of location
1.	Multi-Disciplinary Training Centre, New Delhi	Multi-Disciplinary Training Centre, Haldwani	It comes under green belt and there are land issues.
2.	Central Palmgur and Palm Products Institute, Chennai	Multi-Disciplinary Training Centre, Banglore	Scarcity of water and drainage issues

The Committee decided that KVIC may be asked to submit the request for withdrawing proposal for establishing LBI in New Delhi and in Chennai and refund the funds released for two LBIs as per the Ministry's sanction letter. It was decided that KVIC should submit fresh proposals for establishing LBI in Haldwani and Bangalore.

10. Agenda Item-8: Withdrawal of proposal for setting up an LBI by Sanjay Gandhi Polytechnic (SGPT), Amethi.

The Principal, SGPT had requested for withdrawal of proposal for setting up a LBI in that institution. The reasons were the paucity of space and staff. They were requested to seek permission from the State Government and communicate the same to the MSME. A communication was sent from JS-ARI to Principal Secretary (Industries) in May 2017 and from Secretary (MSME) to The Chief Secretary, UP Government in September 2017. UPTPA vide the letter dated 09.04.2019 reiterated the inability of SGPT to establish & operate LBI under ASPIRE scheme.

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The committee accepted the request of withdrawal of proposal of SGPT and directed that the funds released for the proposal be refunded along with interest as Ministry's sanction letter dated 28.12.2016 in this regard.

11. Agenda Item-9: Project proposal for another LBI under ASPIRE scheme from Jamia Milia Islamia, New Delhi.

One LBI was approved in 2016 and is functional in Jamia Milia Islamia, New Delhi. JMI have submitted a proposal for another LBI in their complex.

The committee decided that the proposal for another LBI by JMI, New Delhi may be examined further taking into consideration relevant factors and be placed before Screening Committee.

12. Agenda Item-10: Proposal from NSIC with regard to consultation charges for implementing LBI/TBI.

NSIC has requested for making a provision in the guidelines for spayment of Consultancy charges (10% of proposal value) essentially for sharing its experience in setting up LBIs, to such agencies/institutions of State Govts. and private entities' who seek mentoring support and help in establishing LBIs under ASPIRE.

The committee decided that it may be considered in future along-with the change in the guidelines of the scheme.

13. Secretary (MSME) directed that:

i. Evaluation and assessment of 36 non functioning LBIs and 5 TBIs may be done at the earliest.
ii. SIDBI may invite or hold workshop with all approved Incubators and sensitize about ASPIRE Fund of Funds.

14. It was further advised that NA empanelled under SFURTI may be considered to be appointed under ASPIRE scheme to implement ASPIRE proposals. Accordingly the committee decided that it may be considered in future along-with the change in the guidelines of the scheme

The meeting concluded with a vote of thanks to all the participants.

*****

20.2.20

Dhanekula Institute of Engineering & Technology

(Approved by AICTE New Delhi Affiliated to JNTU Kakinada)

An ISO 9001 - 2008 Certified Institution

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E-mail : diet.principal@gmail.com, principal@diet.ac.in, website : www.diet.ac.in

TAX INVOICE

11.9.2018

INVOICE NO : CE/ICS/GTE Lab/001
PAN : AAATD1824F
GST NO: 37AAATD1824F1Z3

To
Nalanda Estates Private Limited
Gayathri Nagar
Vijayawada- 52 00 10

GST NO : 37AABCN4913H1ZJ

S.No.	*Name of Material*	*Tests to be conducted*	*Qty.*	*Rate- Rs.*	*Total -Rs.*
1	Compacted ground material	Sand Replacement Test to determine density	7	2000	14,000
				Total	14,000
				CGST- 9%	1,260
				SGST -9%	1,260
				Total Amount- Rs.	16,520

Rs. Sixteen Thousand Five Hundred and Twenty Only

Our Institute Bank details are:

A/c Name : Dhanekula Institute of Engineering & Technology
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11/9/2018

PRINCIPAL

Principal
DHANEKULA INSTITUTE
OF ENGINEERING AND TECHNOLOGY
Ganguru, Vijayawada-521 139

11/9/2018

Gmail

P Siva Prasad <psp2607@gmail.com>

Fwd: SAND DENSITY TEST CHARGES

message

UDHAKAR KAPPALA SITE SUPERVISOR - CIVIL <sudhakar.k@nalanda.edu.in> Mon, Sep 10, 2018 at 11:01 AM
o: diet.cehod@gmail.com
c: psp2607@gmail.com

---------- Forwarded message ----------
From: **Harikrishna A.V.B** <harikrishna@nalanda.edu.in>
Date: Mon, Sep 10, 2018 at 10:54 AM
Subject: Fwd: SAND DENSITY TEST CHARGES
To: SUDHAKAR KAPPALA SITE SUPERVISOR - CIVIL <sudhakar.k@nalanda.edu.in>

---------- Forwarded message ---------
From: **NAGA SRINIVAS Alla** <nagasrinivas@nalanda.edu.in>
Date: Mon, Sep 10, 2018 at 10:54 AM
Subject: SAND DENSITY TEST CHARGES
To: Leela Ravi Kiran Operations Executive <lrkiran@nalanda.edu.in>
Cc: Harikrishna A.V.B <harikrishna@nalanda.edu.in>

Sir,

Rs.16520/- was transferred to Dhanekula Institute vide bank ref no.N253180628473748 to Andhra Bank, Gangoor Br.

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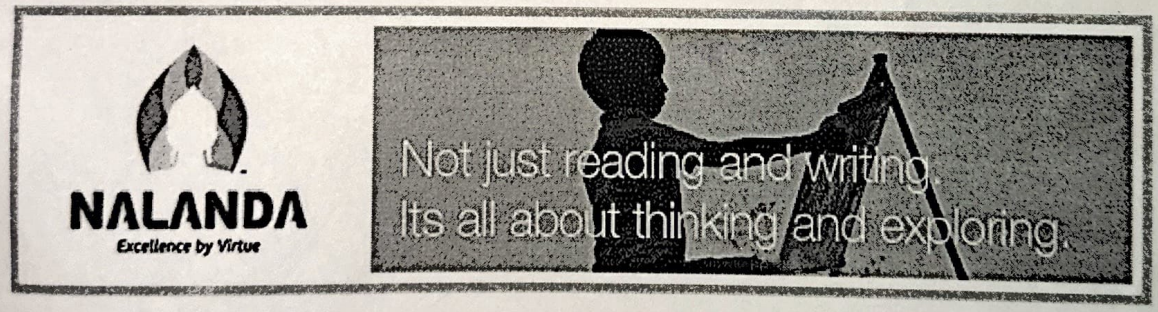
A.N.Srinivas,
Asst.Finance Manager,
Nalanda Educational Institutions,
Mob: 9348030883



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List of Patents:

A.Y. 2022-23

CSE:

S. No.	Applicant Name	Title of the Patent	Application No	Status/ Published Date	Agency to which application is made	Year of application
1	Mr.Veerla Naga Malleswara Rao	User Behavior Analysis Based On An Artificial Intelligence System	202341047148	Awaiting Request	Intellectual Property Of India	2023
2	Dr.M.Aruna Safali	Design and Analysis of Robust IOT Architecture	202341025901 A	05/5/2023	The Patent Office Journal	2023
3	Mrs.K.Anitha	Crime Data Analysis Using Various Machine Learning Models	202341055857 A	1/9/2023	The Patent Office Journal	2023

ECE:

S.No	Faculty/Staff name	Patent		Application details	Publication Date
1	Dr K Srinivasarao	MACHINE LEARNING BASED TEACHING ASSISTANCE APPARATUS FOR TEACHING BRAILLE	Design	Design Number: 6281648	21 May 2023

		LANGUAGE TO THE BLIND STUDENTS			
2	Dr P Pavitra Roy	AUTOMATIC WIRELESS CHARGING MECHANISM FOR SMART HOME DEVICES WITH SMART RADIATION POSITIONING MECHANISM		202341037323 A	16/06/2023

EEE:

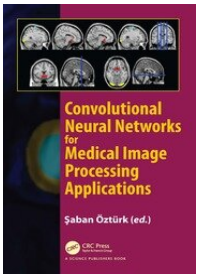
S. No	Faculty/Staff name	Paper / Book/patent title	Events / Journals / Publisher	Application Details	Publication Date
1	Dr I Sai Ram	SOLAR PANEL CLEANING ROBOT FOR INDUSTRIAL SOLAR POWER PLANTS	The Patent Office	Design No: 362071-001	07/10/2022
2	Dr I Sai Ram	LOCALIZATION ERROR MITIGATION TECHNIQUE FOR LOCATION ENABLED IOT IN ATHLETE TRAINING SYSTEM	OFFICIAL JOURNAL OF THE PATENT OFFICE	Application No.202331001873 A	13/01/2023
3	P T Krishna Sai	ISOTHERMAL ELECTRIC STOVE	The Patent Office	353588-001	20/01/2023

R & D Coordinator

Convolutional Neural Networks for Medical Image Processing Applications (https://www.taylorfrancis.com/books/edit/10.1201/9781003215141/convolutional-neural-networks-medical-image-processing-applications-saban-ozturk)

Show Path

Chapter



Convolutional Neural Networks for Medical Image Analysis

By Rajesh Gogineni (/search?contributorName=Rajesh Gogineni&contributorRole=author&redirectFromPDP=true&context=ubx), Ashvini Chaturvedi (/search?contributorName=Ashvini Chaturvedi&contributorRole=author&redirectFromPDP=true&context=ubx)

Book Convolutional Neural Networks for Medical Image Processing Applications (https://www.taylorfrancis.com/books/edit/10.1201/9781003215141/convolutional-neural-networks-medical-image-processing-applications-saban-ozturk)

Edition	1st Edition
First Published	2022
Imprint	CRC Press
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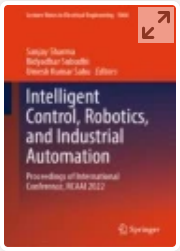
eBook ISBN	9781003215141

ABSTRACT

< Previous Chapter (chapters/edit/10.1201/9781003215141-3/basic-ensembles-vanilla-style-deep-learning-models-improve-liver-segmentation-ct-images-emre-kavur-ludmila-kuncheva-alper-selver?context=ubx)
Next Chapter > (chapters/edit/10.1201/9781003215141-5/ulcer-red-lesion-detection-wireless-capsule-endoscopy-images-using-cnn-said-charfi-mohamed-el-ansari-ayoub-ellahyani-ilyas-el-jaafari?context=ubx)



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Rajesh Gogineni, Y. Ramakrishna, P. Veeraswamy & Jannu Chaitanya

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Part of the Lecture Notes in Electrical Engineering book series (LNEE,volume 1066)

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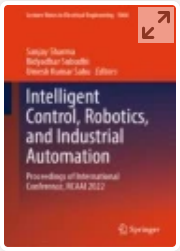

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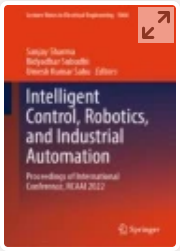

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Chapter

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ABSTRACT

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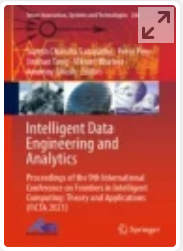

Intelligent Data Engineering and Analytics pp 379–387

Array Thinning Using Social Modified Social Group Optimization Algorithm

E. V. S. D. S. N. S. L. K. Srikala, M. Murali, M. Vamshi Krishna & G. S. N. Raju

Conference paper | First Online: 28 February 2022

Part of the Smart Innovation, Systems and Technologies book series (SIST,volume 266)

Abstract

The thinning in the antenna array involves reducing the number of elements with desired sidelobe level (SLL) and beamwidth (BW). In this paper, the linear antenna array (LAA) is chosen for thinning with the objective of obtaining the suppressing the SLL to the best possible level with the constraint of fixed uniform BW. The considered LAA shall have 40

elements in the full array configuration in which all the elements are switched ON. Further, the LAA is thinned with different magnitudes while the elements to be switched OFF are determined as per the objective using the social group optimization algorithm (SGOA). The process of thinning is perceived as the non-uniform spacing technique of suppressing the SLL with constraints. The results are analyzed in terms of radiation pattern plots. The simulations are carried out in MATLAB.

Keywords

Linear antenna array **SGOA** **Array thinning**

Radiation pattern

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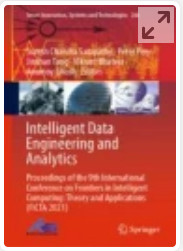

Intelligent Data Engineering and Analytics pp 351–358

PAPR Analysis of FBMC and UFMC for 5G Cellular Communications

T. Sairam Vamsi, Sudheer Kumar Terlapu & M. Vamshi Krishna

Conference paper | First Online: 28 February 2022

Part of the Smart Innovation, Systems and Technologies book series (SIST,volume 266)

Abstract

Orthogonal frequency-division multiplexing (OFDM) is a renowned multiple access technique for fourth-generation (4G) wireless cellular systems, as it provides good transmitting power efficiency, multipath propagation and high spectral efficiency. This OFDM is not satisfying some of the requirements for fifth-generation (5G) cellular systems as it has

having limitations of more side band leakage power, more peak-to-average power ratio (PAPR) and out-of-band radiation (OOB). The main objective of this paper is to design an efficient waveform which provides high spectral efficiency and low PAPR for 5G Systems. The distinct sub-carriers and different QAM modulations are used to analyse PAPR of various multiplexing techniques like universal-filtered multicarrier (UFMC) and filter bank multicarrier modulation (FBMC) which serve 5G requirements in comparison with OFDM for 4G. At the end of the analysis, this paper describes which modulation is best suited for 5G that satisfies all basic requirements.

Keywords

Spectral efficiency **Distinct sub-carriers**

Side band power

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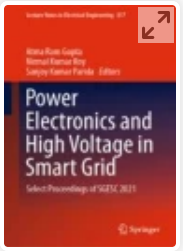

Power Electronics and High Voltage in Smart Grid pp 299–308

A Novel Hybrid GMPPT Scheme Based on P&O-MM with Reduced Output Power Oscillations Under PSC for PV System

Muralidhar Nayak Bhukya, P. T. Krishna Sai, Manish Kumar, Shobha Rani Depuru & T. Sudhakar Babu

Conference paper | First Online: 16 February 2022

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Abstract

Traditional Perturb and Observe (P&O) controllers are preferred over metaheuristic algorithms during uniform irradiance conditions but fail to replicate the same performance during Partial Shaded Conditions (PSC). Hence, a novel hybrid GMPP Tracking (GMPPT)

scheme based on Perturb and Observe and Mean Method (PO-MM), which gives effective performance under any weather condition with reduced output power oscillations, is proposed. During PSC, the P&O controller remains at the first obtained peak of the P–V characteristics. Therefore, the rest of the characteristics are examined by the Mean Method to attain exact GMPP.

Keywords

Perturb and observe **Mean method**

Power oscillations

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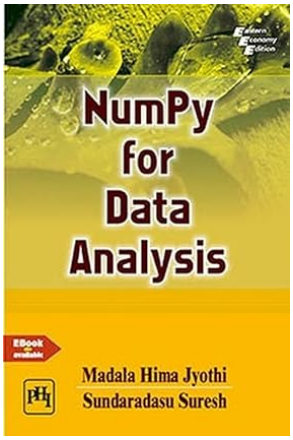

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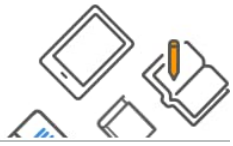

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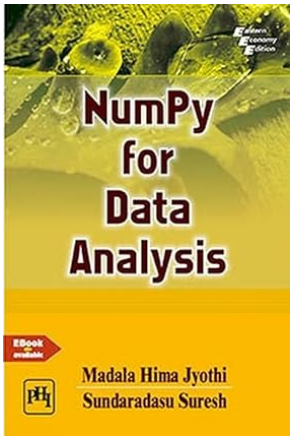

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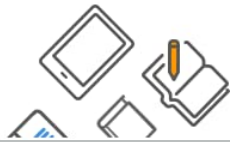

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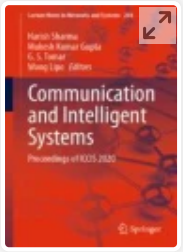

Communication and Intelligent Systems pp 201–209

Butterfly Optimization Algorithm-Based Optimal Sizing and Integration of Photovoltaic System in Multi-lateral Distribution Network for Interoperability

Thandava Krishna Sai Pandraju ✉ & Varaprasad Janamala

Conference paper | First Online: 29 June 2021

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Abstract

In this paper, a new and simple nature-inspired meta-heuristic search algorithm, namely butterfly optimization algorithm (BOA), is proposed for solving the optimal location and sizing of solar photovoltaic (SPV) system. An objective function for distribution loss minimization is formulated and minimized via optimally allocating the SPV system on the main feeder. At the first stage, the computational efficiency of BOA is compared with various other similar works and highlights its superiority in terms of global solution. In the second stage, the

interoperability requirement of SPV system while determining the location and size of SPV system among multiple laterals in a distribution system is solved without compromises in radiality constraint. Various case studies on standard IEEE 33-bus system have shown the effectiveness of proposed concept of interline-photovoltaic (I-PV) system in improving the distribution system performance in terms of reduced losses and improved voltage profile via redistributing the feeder power flows effectively.

Keywords

Butterfly optimization algorithm

Interline-photovoltaic system **Interoperability**

Loss minimization **Radial distribution system**

Radiality constraint

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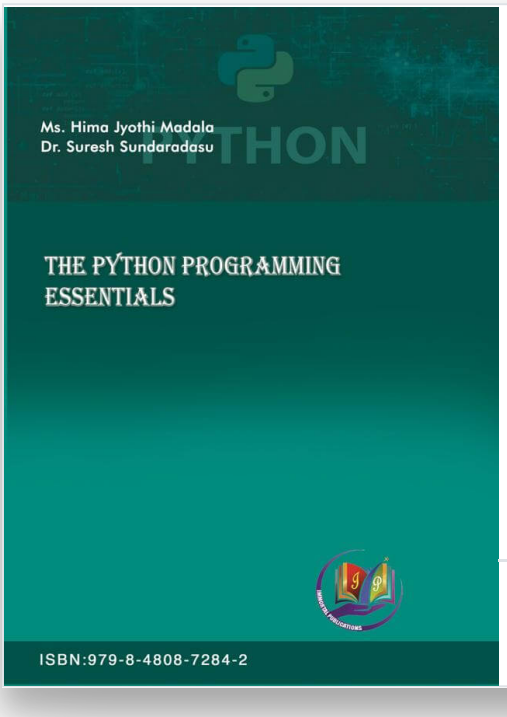

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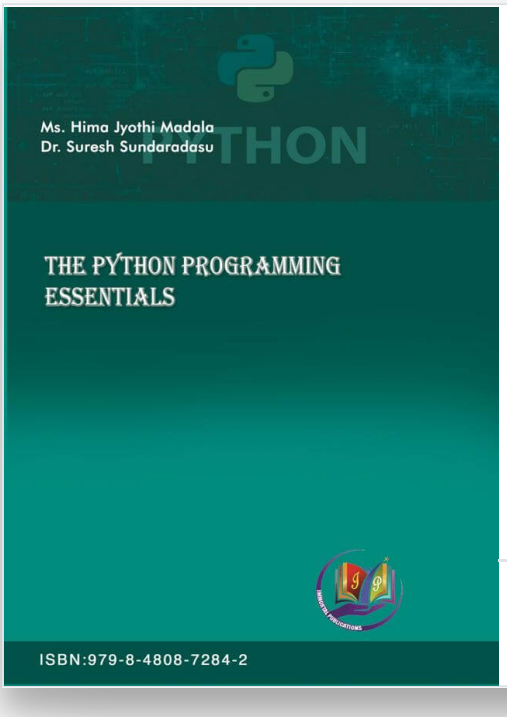

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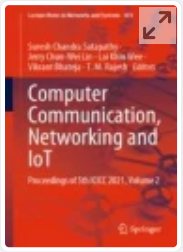

Computer Communication, Networking and IoT pp 235–243

High-Impedance Surface Backed Circular Patch Antenna for Wireless Communications

Akash Kumar Gupta ✉, P. Satish Rama Chowdary & M. Vamshi Krishna

Conference paper | First Online: 05 October 2022

Part of the Lecture Notes in Networks and Systems book series (LNNS,volume 459)

Abstract

A multi-band antenna is a very attractive solution for wireless communication applications. A low-profile miniaturized compact circular patch antenna backed with a high-impedance surface antenna is presented in this work. A high-impedance surface-based ground plane is an effective method for suppressing the surface waves and hence improves the performance of a patch antenna. The HIS-based ground plane is designed on Fr-4 substrate with a rectangular patch of dimensions of 10 mm × 10 mm having protrusion at the center of the

patch. A circular microstrip patch antenna is designed on Fr-4 substrate, and its performance is compared with metallic ground plane and HIS ground plane. The circular patch antenna backed with HIS ground plane radiates in multiple bands 1.63–1.66, 3.86–4.03, 4.19–5.12 GHz with bandwidths of 3–5% in all bands.

Keywords

Circular microstrip patch **High-impedance surfaces**

Multi-band

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4. Biohydrogen Production from Biomass

Authors : Lekshmi Gangadhar, Nalluri Abhishek, Putti Venkata Siva Teja, T. O. Daniel, Siva Sankar Sana, G. R. Arpitha, Anima Nanda

Published in: Bioenergy Research: Revisiting Latest Development

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Abstract

Dependence on fossil fuels as the key sources of energy has led to severe energy crisis and environmental issues, i.e., depletion of fossil fuel and emission of pollutants. Production of hydrogen plays a very important role in the hydrogen economy. One of the promising approaches to hydrogen production is the conversion from abundant, clean, and sustainable biomass. Alternative thermochemical (pyrolysis and gasification) and biological processes (biophotolysis, water-gas shift reaction, and fermentation) can be applied to the production of hydrogen in practice. Biomass research is receiving increasing attention recently due to the probable application of waste-to-energy. It is possible that converting biomass into gaseous and queous fuels, electricity, and especially hydrogen is a more efficient way of using biomass.

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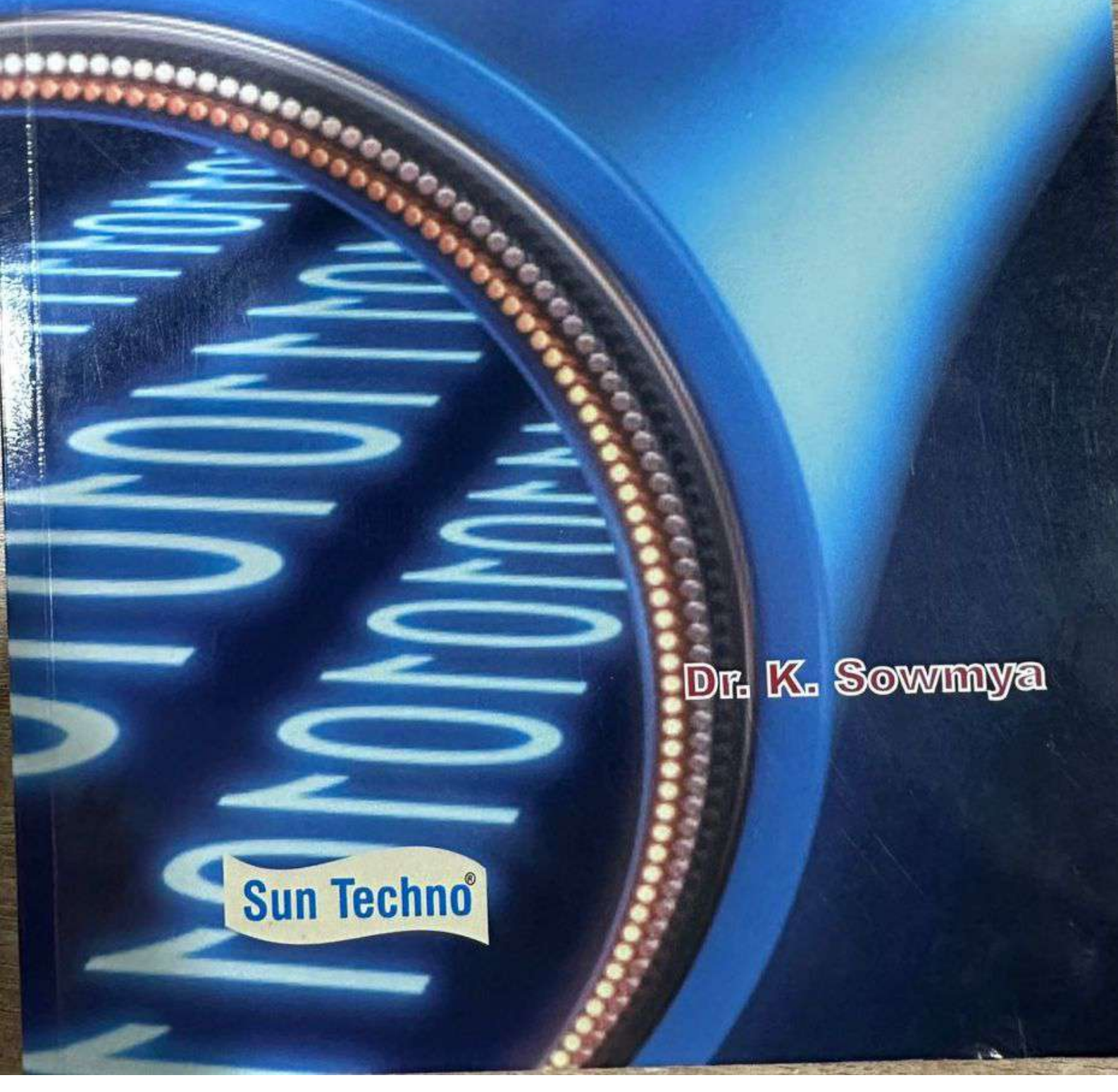

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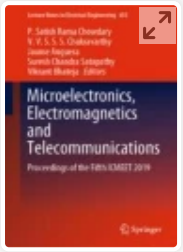

Microelectronics, Electromagnetics and Telecommunications pp 11–19

DGS-Based T-Shaped Patch Antenna for 5G Communication Applications

Akash Kumar Gupta, Anil Kumar Patnaik, S. Suresh, P. Satish Rama Chowdary & M. Vamshi Krishna

Conference paper | First Online: 24 June 2020

Part of the Lecture Notes in Electrical Engineering book series (LNEE,volume 655)

Abstract

Technologies are advancing day by day after the successful implementation of 4G networks. Now, mobile technology is footed into 5G communication. To provide antenna solutions for 5G communications, a T-shaped multiband antenna has been proposed. The T-shaped microstrip patch antenna is intended to operate on 28/38 GHz frequency. T-shaped antenna has a compact size and planar geometry with high gain. To increase the bandwidth of the antenna, defected ground structures are used. These structures are formed by etching rectangular slots in ground.

Keywords

T-shaped antenna **Defected ground structure**

Multiband antenna **Dual-band frequencies** **Gain**

Radiation pattern

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2019, Pages 101-114

8 - Drilling of glass fiber reinforced plastics (GFRPs): An experimental investigation and finite element study

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Abstract

The use of glass fiber reinforced plastic (GFRP) composites has increased manifold over the last few years. These are generally used in various fields like mechanical, aerospace, and electrical engineering. Recently, GFRP has extended its usage in the automotive and general engineering markets due to its endeavored properties like high stiffness, light weight, and high specific strength. Hole-making is an integral part of the product development cycle. Drilling of GFRP composite materials presents many questions to researchers and scientists. The research in the field has focused on optimization of machining parameters. In the present study, we carried out finite element analysis (FEA) of the drilling behavior of GFRPs. We used the LS-DYNA 13.0 solver in an attempt to investigate the statistical significance of drilling parameters on thrust force and torque. We performed the experiments based on the L_{27} Taguchi design method and we employed the ANOVA for response surface quadratic model to make assumptions for developing a FE model for prognosticating drilling-induced damage. We found the FE results to be in good agreement with the experimental results.

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