KIT DIGIBYTES

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Institution Vision

To impart quality technical education emphasizing innovations and research with social and ethical values.

Department Vision

To produce technically competent and socially responsible Electronics and Communication Engineers to meet industry needs.

Institution Mission

1. Establishing state-of–the-art infrastructure, effective procedures for recruitment of competent faculty and innovative teaching practices.

2. Creating a conducive environment for nurturing innovative ideas and encouraging research skills.

3. Inculcating social and ethical values through co-curricular and extra-curricular activities.

Department Mission

1. Establishing state-of–the-art facilities in the field of Electronics and Communication Engineering and enriching the knowledge of faculty through continuous improvement process.

2. Adopting innovative teaching learning practices and facilitating industry institute partnership for professional development.

3. Inculcating ethical and social values through extension activities.
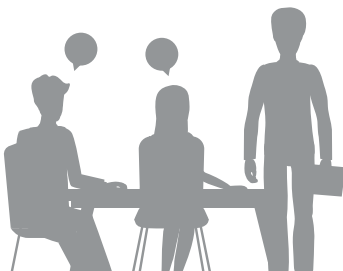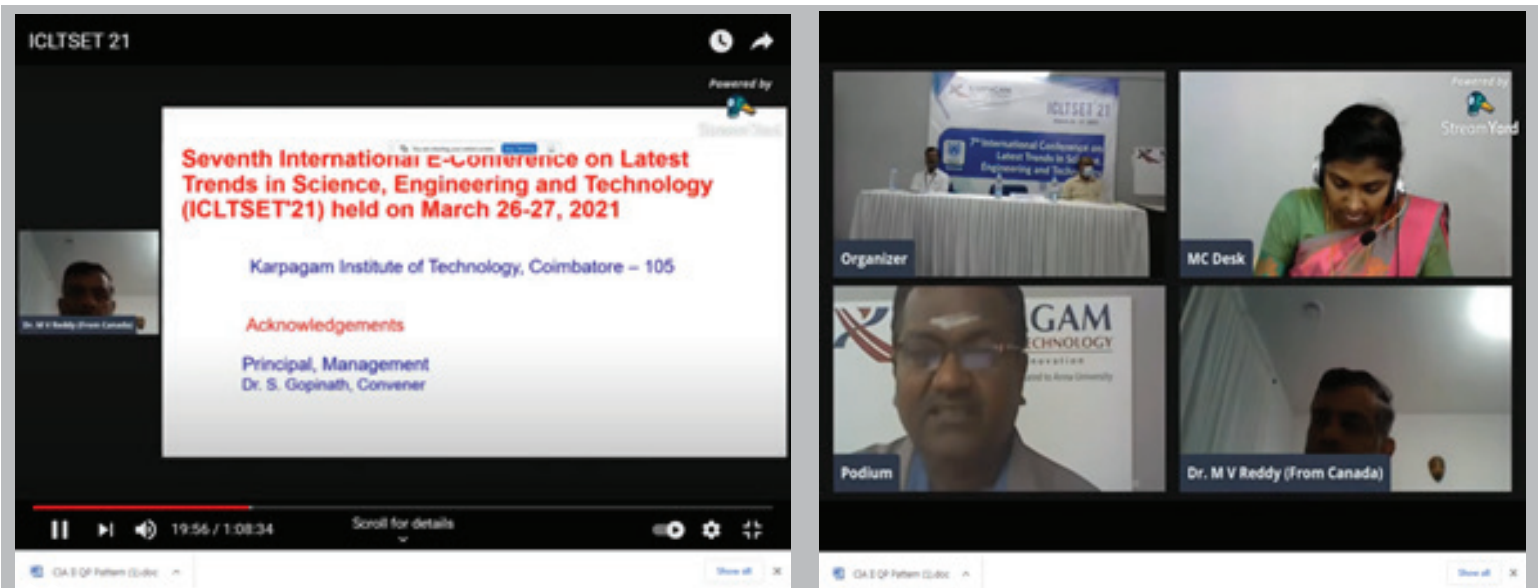
EDITORIAL TEAM

Mrs. V. Pavithra, AP/ECE

N. K. Karthinee, IV year ECE
R. Koushik, IV year ECE
M. Poorani, III year ECE
A. S. Athulya, II year ECE

DEPARTMENT NEWS

"The 7th International E-Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'21) was conducted on March 26th & 27th of 2021. The Inauguration was held through Google meet. Dr. S. Padmanaban, Head of Science and Humanities welcomed the Chief Guest. Mrs. Salomi, Assistant Professor, Department of English introduced the chief guest. Dr. P. Manimaran, Principal presided over the function and addressed the gahtering. Dr. M. V. Reddy, Senior Researcher, Institute of Research Hydro – Quebec, Montreal, Canada, Chief guest of the day and delivered on Recent Advances in Nanomaterials for Energy Storage and Conversion. He also motivated participants to concentrate on research and product development. Dr. Sanjay Sengupta, Former Scientist, CSIR, New delhi delivered the keynote address on Research perspectives. Dr. S. Gopinath, Convener & HoD/ECE delivered the vote of thanks. 100 participants attended the inaugural function and benefitted from the program.
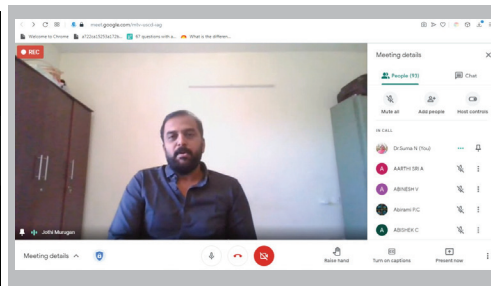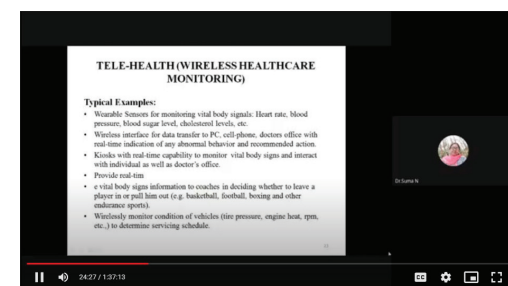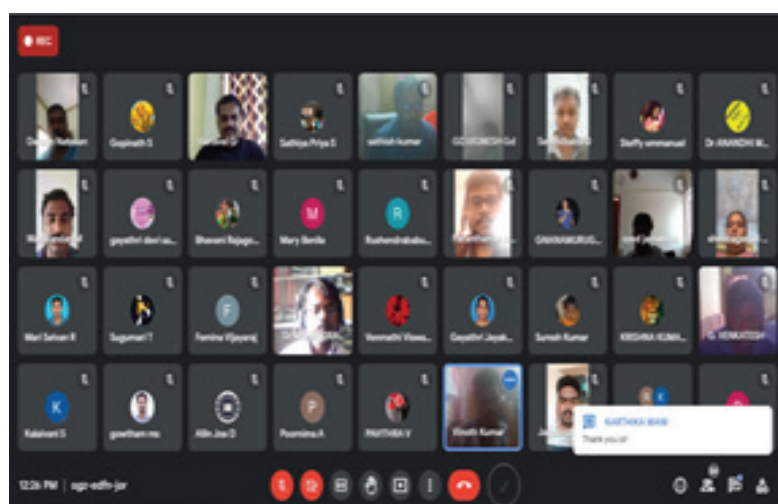

VIRTUAL WEBINAR

Virtual webinar on Recent Research and development in Electronics and Communication Engineering on 12 February 2021. Dr.N.Suma, Professor, Department of ECE, Karpagam Institute of Technology, Coimbatore, resource person of the webinar, delivered a talk on recent developments and innovative products in market in the field of communication engineering.

Virtual workshop on Design Thinking, Critical Thinking and Innovation Design on 27 February 2021. Mr. A. Jothimurugan, Managing Director, Invenire Technologies Ltd, Coimbatore, the resource person of the webinar, explored the recent trends and innovation technologies in the field of electronics and communication engineering. 93 participants attended the program and took part in the discussion.

DID YOU KNOW THAT...

The word **"ENGINEER"** is derived from the latin word **"INGENIUM",** which means **"NATIVE TALENT"** or **"CLEVERNESS"**

The first computer mouse was introduced in **1968** by **Douglas Engelbart,** at the fall computer Expo in **San Francisco**.

DEPARTMENT NEWS

WEBINAR / SEMINAR / WORKSHOP

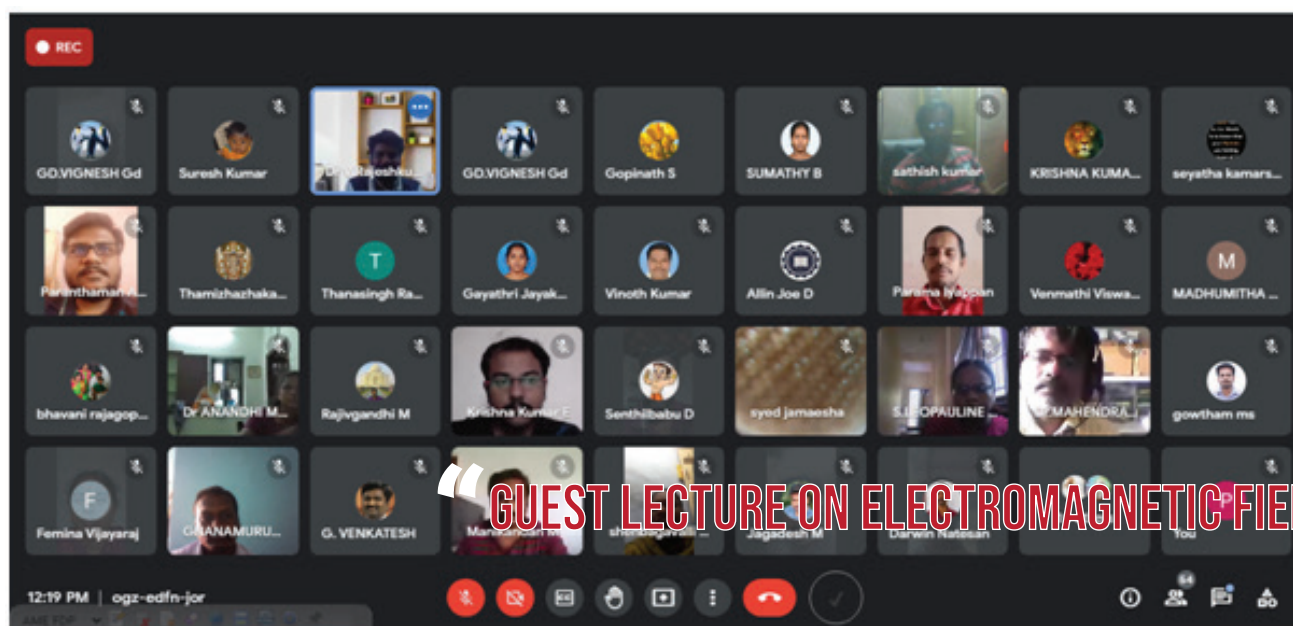Virtual Lecture on PIC Microcontroller based Home alarm system on 03 April 2021. Ms.S.Madhumitha, Assistant Professor, Department of ECE, Karpagam Institute of Technology, Coimbatore, resource person of the lecture, elaborated the design methodology, implementation of Home alarm system using PIC Microccontroller.

Organized ISTE sponsored virtual seminar on RF MEMS and devices on 20 March 2021. Mr. T. Jayanandan Managing Director, Tesla Minds Pvt. Ltd, Chennai and Dr. B. Nataraj, Associate Professor, Department of ECE, Sri Ramakrishna Engineering College, Coimbatore were the resource persons of the seminar. They shared and highlighted the role of antennas, MEMs devices in communication technologies. 90 participants attended the seminar and actively participated in the discussion.

Virtual Lecture on Cubic Satellites (Cubesat) on 17 April 2021. Dr.M.S.Gowtham, Associate Professor, Department of ECE, Karpagam Institute of Technology, Coimbatore, the resource person of the lecture, abrupted the design, launch and propulsion of Cubesat. He explored the future developments of Cubesat. 93 students and faculty members attended the program.

Chips are complex structures made of millions, or even billions of transistors.

IETE Sponsored Virtual Guest Lecture on Recent Advancements in Wireless Communications on 10 February 2021. Dr. K. B. Gurumoorthy, Assistant Professor, Department of ECE, Sri Ramakrishna Engineering College, Coimbatore, the resource person of the virtual guest lecture, explored and presented his views on advancements in wireless communications and 5G technologies. 87 participants attended the guest lecture.

DEPARTMENT NEWS

"GUEST LECTURE ON ELECTROMAGNETIC FIELDS"

Virtual Guest Lecture on Electromagnetic Fields on 13 March 2021. Dr. V. Rajeshkumar, Associate Professor, Department of ECE, School of Electrical Engineering, Vellore Institute of Technology, Vellore, resource person of the virtual guest lecture, briefed the concepts of electro magnetic fields and cleared the queries of students. 93 participants attended the guest lecture.

IETE sponsored Virtual Seminar on Ethical Responsibilities in Industries on 16 March 2021. Mr. Nareshkumar Sathyamoorthy, IT Service Manager, Common Wealth Bank of India, Australia, the resource person of the webinar, portarayed how an organization should operate in a fair and ethical manner. 93 participants attended the program.

FACULTY ACHIEVEMENTS

	S.No	Name of the Faculty	Title of the Book/Book Chapter	Name of the Publisher	Year	ISBN
BOOK PUBLICATION	1.	D. N. A. Natraj, Dr. K.B. Gurumoorthy & Dr. S. Gopinath	TDMA Based Energy Efficient Cluster Routing Approach for Sensor Networks	Krishna Publication House, Gujarat	2021	978-81-947388-5-5
	2.	Dr. S. Gopinath, Dr. M. S. Gowtham & S. Pragadeswaran	Location Aware Energy Efficient Routing Protocol for Increasing Network Lifetime in WSN	Krishna Publication House, Gujarat	2021	978-81-947388-5-5

FACULTY ACHIEVEMENTS

	S.No	Name of the Faculty members	Title of the Paper	Name of the Journal	Vol.No., Issue No., page No., DOI No.	Journal Indexed
JOURNAL PUBLICATION	1.	Ms.S.Gayathri, Mr.S.Pragadeswaran	Landmine Detection Using Drone	International Journal of Advanced Engineering Science and Information Technology (IJAESIT)	ISSN: 2349-3216 Vol. 5 Issue. 5 May, 2021 Page No. 49-59	Peer Review
	2.	Mr.S.Pragadeswaran, Ms.S.Gayathri, Dr.S.Gopinath, Ms.R.Felshiya Rajakumari	Wireless Sensor Networks Security Issues, Security Needs and Different Types of Attacks Based on Layers: A Survey	International Journal of Advanced Engineering Science and Information Technology (IJAESIT)	ISSN: 2349-3216 Vol. 5 Issue. 5 May, 2021 Page No. 60-67	Peer Review
	3	Dr.S.Gopinath, Mr.S.Pragadeswaran, Ms.R.Felshiya Rajakumari, Ms.S.Gayathri	Assessment Work on Blue Brain Technology	International Journal of Advanced Engineering Science and Information Technology (IJAESIT)	ISSN: 2349-3216 Vol. 5 Issue. 5 May, 2021 Page No. 35-38	Peer Review
	4	Dr.S. Gopinath, Mr.K.B. Gurumoorthy, Mr.S. Lakshmi Narayanan, Mr.M. Kasiselvanathan, Mr.S.Pragadeswaran	Cluster based Optimal Energy Efficient Routing Protocol for Wireless Sensor Networks	Gestao, Inovaco e Tecnologias (GEINTEC)	ISSN:2237-0722 Vol. 11 Issue. 2 2021 Page No. 1921-1932	Peer Review
	5	Mr.S. Pragadeswaran, Dr.S. Gopinath, Mr.S. Keerthivasan, Mr.R. Premkumar, Mr.M. Vinoth	Security Analysis in Wireless Sensor networks: Challenges, Threatsand Security Issues	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	ISSN :2321-9653 Vol. 9 Issue. 4 April, 2021 Page No. 683-689	Peer Review

FACULTY ACHIEVEMENTS

JOURNAL PUBLICATION

S.No	Name of the Faculty members	Title of the Paper	Name of the Journal	Vol.No., Issue No., page No., DOI No.	Journal Indexed
6	Mr. S. Pragadeswaran, Ms. S. Madhumitha Dr. S. Gopinath	Certain Investigations on Military Applications of Wireless Sensor Networks	International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)	ISSN :2581-9429 Vol. 3 Issue. 1 March, 2021 Page No. 14-19	Peer Review
7	Mr.S .Pragadeswaran, Dr.N. Suma, Ms.S .Madhumitha, Dr.S. Gopinath	Fuzzy based Fault Tolerant Routing Protocol for Node Reliability in MANET	Annals of the Romanian Society for Cell Biology	ISSN :1583-6258 Vol. 25 Issue. 1 2021 Page No. 7223-7232	Scopus
8	Dr.S. Gopinath, Mr.K Vinoth Kumar, Ms.P Elayaraja, Ms.A Parameswari, Mr.S Balakrishnan, Mr.M Thiruppathi	SCEER: Secure cluster based efficient energy routing scheme for wireless sensor networks	Materials Today Proceedings	ISSN :2214 – 7853 Vol. Issue. Page No. 1-6	Scopus
9	Dr.S Gopinath, Mr.P Ashok, Mr.M Ganesh Madhan	Performance evaluation of free space optical link driven by gain switched temperature dependent quantum cascade lasers	Laser Physics Letters	ISSN :1612-202X Vol. 18 Issue. 30 April, 2021 Page No. 1-5	SCI

SEMINARS / WORKSHOPS / SUMMER / WINTER SCHOOLS/ TRAINING PROGRAMMES

Sl. No.	Name of the Faculty	Title of the Conference / Seminar / Workshop / FDP/ STTP Attended	Date	Institution
1	Dr. S. Gopinath, S. Pragadeswaran	International Conference on Artificial Intelligence Smart Computing ICAISC 20	22.01.2021 & 23.01.2021	Bannari Amman Institute of Technology, Erode
2.	Dr. Gopinath S, S. Pragadeswaran	National level e-Conference on Sustainable Green Computing in Intelligent Research – ABACon 2.0	18.12.2020 & 19.12.2020	Sahrdaya College of Engineering and Technology, Kodakara

FACULTY ACHIEVEMENTS

SEMINARS / WORKSHOPS / SUMMER / WINTER SCHOOLS/ TRAINING PROGRAMMES

Sl. No.	Name of the Faculty	Title of the Conference / Seminar / Workshop / FDP/ STTP Attended	Date	Institution
3.	Dr. S. Gopinath	ATAL Online FDP on Team-building and Coordination	15.02.2021 to 19.02.2021	Gandhi Institute of Technology and Management
		AICTE Sponsored Short Term Training Program (STTP) on IoT based WSN using COOJA Network Simulator	07.12.2020 to 12.12.2020	IFET College of Engineering
4.	Dr. M. S. Gowtham	ATAL Online FDP on "Modern Techniques For Wireless Communication"	17.05.2021 to 21.05.2021	Madhav Institute of Technology and Science
		AICTE-ISTE Sponsored Refresher/Induction Program on Internet of Things (IoT) using Arduino & Raspberry PI	09.02.2021 to 15.02.2021	GRG Polytechnic College
		3-days online FDP Effective strategies to Effective strategies to improve Mentor-Mentee bonding	20.01.2021 to 22.01.2021	Easwari Engineering College
		NITTTR Online Training Programme on Quality Assurance Through Accreditation	28.12.2020 to 01.01.2021	NITTTR, Chennai
		ATAL Online FDP on "Robotics"	05.01.2021 to 09.01.2021	Rajeev Gandhi Memorial College of Engineering and Technology
5.	Dr. T. Manoj Kumar	ATAL Online FDP on Cyber Security	18.01.2021 to 22.01.2021	St. Joseph's College of Engineering
		ATAL Online FDP on Internet of Things	04.01.2021 to 08.01.2021	P.S.R Engineering College
6.	Mr. A. G. Paranthaman	NPTEL Online Certificate Course on Antennas	January 2021 to April 2021	IIT BOMBAY
7.	Ms. S. Madhumitha	ATAL Online FDP on 'Wearable Devices"	15.02.2021 to 19.02.2021	Anna University
		AICTE-ISTE Sponsored Refresher/Induction Program on Internet of Things(IoT) using Arduino and Rasperry PI	09.02.2021 to 15.02.2021	GRG Polytechnic College
		ATAL Online FDP on Internet Of Things	14.12.2020 To	Institute of Engineering &

FACULTY ACHIEVEMENTS

SEMINARS / WORKSHOPS / SUMMER / WINTER SCHOOLS/ TRAINING PROGRAMMES

Sl. No.	Name of the Faculty	Title of the Conference / Seminar / Workshop / FDP/ STTP Attended	Date	Institution
8.	Mr. E. Veera Boopathy	3-days online FDP Effective strategies to improve Mentor –Mentee bonding	20.01.2021 to 22.01.2021	Easwari Engineering College
9.	Mr. S. Pragadeswaran	NPTEL Online Certification Course on Sensors and Actuators	January – April 2021	IIT Bombay
		Short Term Training Programme on Emerging Trends and Research Challenges in Next Generation Wireless Networks	15.03.2021 to 20.03.2021	Kongunadu College of Engineering and Technology
		NITTTR Online Training Programme on Blended and Flipped mode of Teaching	01.03.2021 to 05.03.2021	NITTTR, Chennai
		NITTTR Online Training Programme on Question Paper Authoring & Student Evaluation	18.01.2021 to 22.01.2021	NITTTR, Chennai
		ATAL Online FDP on Lab on Chip	26.12.2020 to 30.12.2020	G. Pulla Reddy Engineering College
10.	Mrs. V. Pavithra	Short Term Training Programme on Emerging Trends and Research challenging in Next Generation wireless network	29.03.2021 to 03.04.2021	Kongunadu College of Engineering and Technology

STUDENT PARTICIPATION

S. No.	Name of the Student	Title of the Conference /Symposium Seminar / Workshops	Date	Institution
1.	Devatharshini S A, Mithun Kumar N, Vishnu Surya P	Introduction To Cybersecurity	07.01.2021	Corporate Social Responsibility (CISCO)
2.	Kaviya B	Code Innovation Series Hackathon	26.02.2021	Github &Incubate Ind
3.	Sundar Raj A	Code Innovation Series Hackathon	26.02.2021	Github &Incubate Ind
4.	Kaviya B	Deep Learning in Everyday Life	20.03.2021	Falcon Edutech

STUDENTS ACHIEVEMENTS

	S. No.	Name of the Student	Title of the Conference /Symposium Seminar / Workshops	Date	Institution
SEMINARS / WORKSHOPS / SUMMER / WINTER SCHOOLS/ TRAINING PROGRAMMES	5.	Yaashika J	Bio Hyphenzia 2021 -Tech Intellect	11.03.2021 & 12.03.2021	PSGR Krishnammal College For Women
	6.	Kaviya B	Hello A2019 Bot:Getting Started With Building Bots"	20.03.2021	Automation Anywhere
	7.	Karthika S	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	8.	Abishek C	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	9.	Yesudas S	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	10.	Sangeetha M	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	11.	Yasshikaa J	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	12.	Santhosh Nirmal S	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	13.	Sathyanarayanan S	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	14.	Shanmuga Priya C	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	15.	Kaviya B	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	16.	Nithiya Sri R	Big Data and IoT Systems	27.03.2021	Narasu's Sarathy Institute of Technology
	17.	S. Athulya	Virtual Workshop on Smart Phone Troubleshooting	17.04.2021	Karpagam Institute of Technology, Coimbatore
	18.	N. Mithun Kumar	Virtual Workshop on Smart Phone Troubleshooting	17.04.2021	Karpagam Institute of Technology, Coimbatore
	19.	N. Mithun Kumar	Online Course on Computer Vision Essentials	April 2021	Great Learning Academy