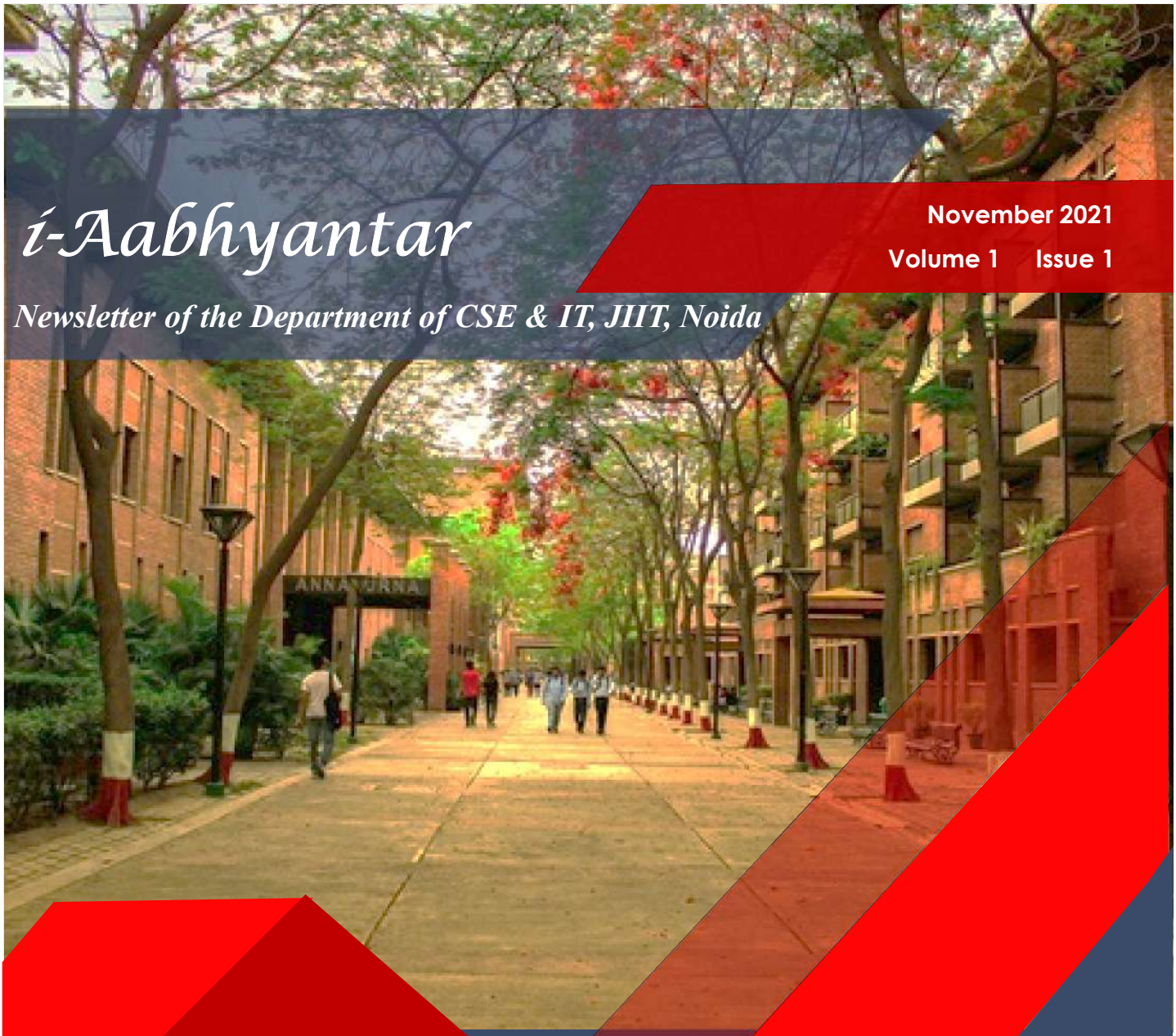

i-Aabhyantar

Newsletter of the Department of CSE & IT, JIIT, Noida

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Volume 1 Issue 1

Department of Computer Science & Engineering and Information Technology

Jaypee Institute of Information Technology, Noida

(Deemed to be University under Section 3 of UGC Act 1956)

EDITORS: Dr. Charu ● Dr. Mukesh Saraswat ● Dr. Himani Bansal ● Dr. Pulkit Mehndiratta ● Dr. Vikash

Inside ...

Pro-Chancellor's Message

I am happy to know that the Department of CSE & IT is publishing its inaugural issue of the newsletter "i-Aabhyantar". I believe that "i-Aabhyantar" will showcase the activities of the Department namely in the areas of teaching, research, placements, conferences, workshops, training programs, expert lectures and collaborations. In present time, computer science and IT is one of the fastest growing technology field. Modern society infrastructures and functions are mostly based upon IT. It is playing an important role in our daily live. At JIIT we aim to motivate and nurture our students to excel in multifaceted computing and IT technologies. I would like to congratulate the editorial team for bringing out this inaugural issue.

Prof. S.C.Saxena, Pro-Chancellor, JIIT, Noida

Vice-Chancellor's Message

I am happy to know that the Department of Computer Science & Engineering and Information Technology (CSE&IT) of Jaypee Institute of Information Technology (JIIT) Noida is bringing out their first ever Newsletter "***i-Aabhyantar***". The department strives to create an environment encouraging students to learn more and provide an auxiliary system to support extra-curricular participation. The Newsletter is a testimony to all the quality teaching and research happening in the Department. I look forward to reading about the various activities and achievements in the Newsletter.

Prof. Y.R. Sood, Vice Chancellor, JIIT, Noida

Head of the Department's Message

I am delighted and excited to present you first ever edition of '***i-Aabhyantar***', the quarterly newsletter of CSE&IT Department, at Jaypee Institute of Information Technology (JIIT), Noida. It's a matter of pride and satisfaction that the department, with 100 faculty members and 130 Ph.D. scholars, is successful in achieving the prime goal of a University in to create and disseminate the knowledge. This newsletter is a small step to display various activities, academic achievements & success stories of our students and faculty. I strongly believe that '***i-Aabhyantar***', will provide another platform for our students and stakeholders to get enlightened and participate in the growth of the department. I am very thankful to Dr. Charu and editorial team members, Dr. Mukesh Saraswat, Dr. Himani Bansal, Dr. Pulkit and Dr. Vikash who worked very hard to generate this news letter.

Prof. Vikas Saxena, Head (CSE&IT), JIIT, Noida

Department of Computer Science & Engineering and Information Technology (CSE & IT) is very delighted and proud to introduce the first issue of Departmental Newsletter "***i–Aabhyantar"***. It will present the deep insight of the departmental activities, accomplishments, research, and its contributions towards the society.

In this difficult time of COVID-19 pandemic, the world has seen deep pain and sorrow. With the encouragement and guidance of our Hon'ble Founder Chairman, Shri Jaiprakash Gaur, Hon'ble Chairman, Shri Manoj Gaur, Hon'ble Pro-Chancellor, Prof. S. C. Saxena, and Hon'ble Vice-chancellor, Prof. Yog Raj Sood, the CSE & IT Department has maintained its quality to achieve the departmental vision and mission.

In each era, education is the prime step towards the development of a sustainable and civilized society. With the evolution of the information age, it is arduous to dig the correct information, which is only possible with the help of computers and technology. The main objective of ***i–Aabhyantar*** is to publish the official statement and statistics about the department of CSE & IT to the world. Moreover, this newsletter will be a dais to advancement, where our department exhibits contemporary issues and activities.

Department of CSE & IT committed to bringing out the achievements and new advancements, which put our department in the first row. This newsletter is a small step towards much bigger advancement over time. We hope that ***i–Aabhyantar*** will contain useful information for future endeavours.

Hope you are taking all the safety measures of the COVID-19.

STAY SAFE STAY HOME

With regards

Editors

Vision and Mission of Institute

Vision

To become a Centre of Excellence in the field of IT & related emerging areas education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

Mission

1. To develop as a benchmark University in emerging technologies.

2. To provide state-of-the-art teaching learning process and R&D environment.

3. To harness human capital for sustainable competitive edge and social relevance.

Vision and Mission of CSE&IT Department

Vision

To be a Centre of Excellence for providing quality education and carrying out cutting edge research to develop future leaders in all aspects of computing, IT and entrepreneurship.

Mission

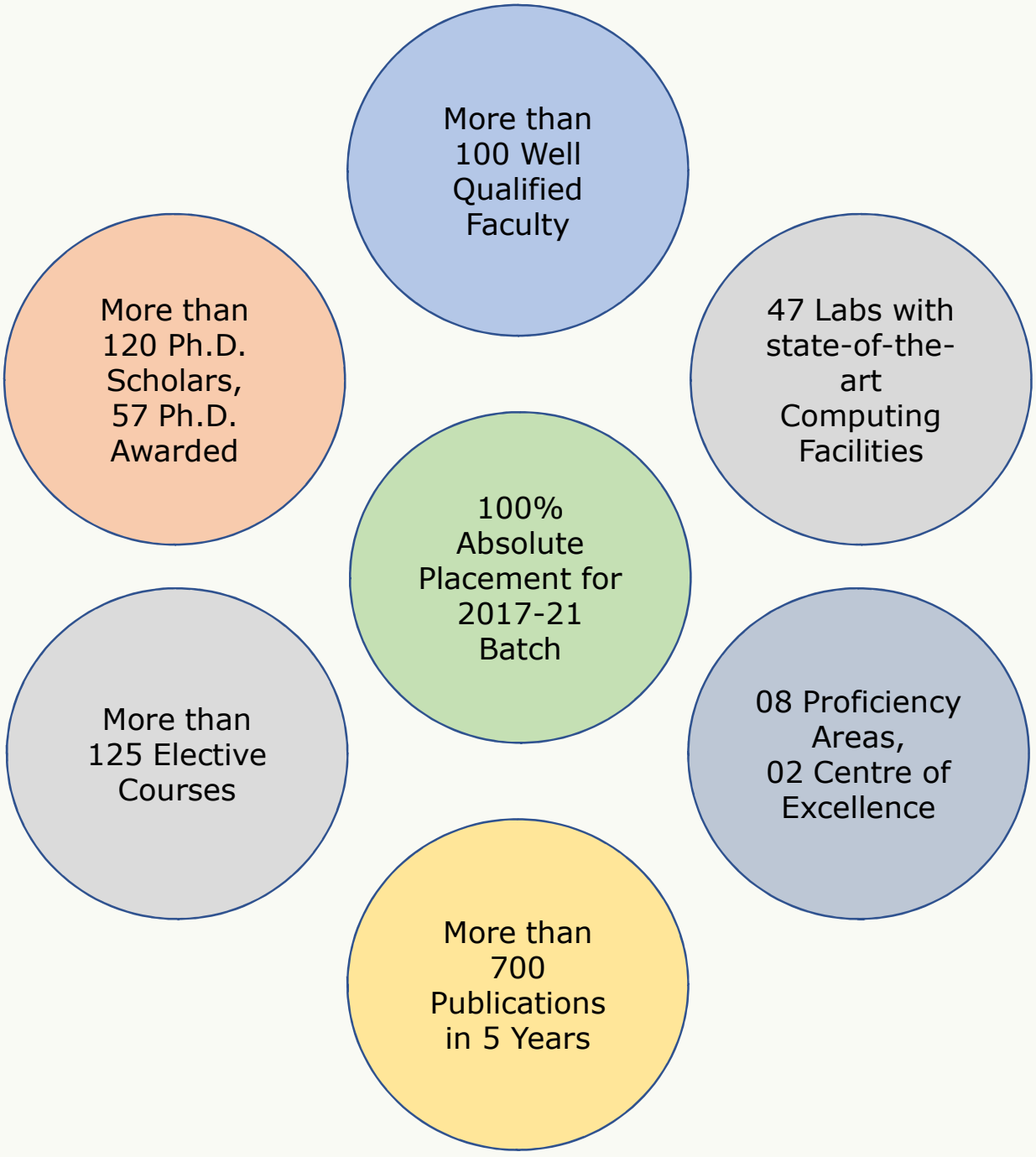
1. To offer academic programme with state-of-the-art curriculum having flexibility for accommodating the latest developments in areas of computer science and IT.

2. To conduct research and development activities in contemporary and emerging areas of Computer Science & Engineering and IT.

3. To inculcate IT & entrepreneurial skills to produce professionals capable of providing socially relevant and sustainable solutions.

Departmental Spotlight

The Department of Computer Science & Engineering and Information Technology is a leading department of Jaypee Institute of Information Technology (JIIT), Noida. Some of the highlights of the department are shown below:



DGX-Workstation

To provide the high-end infrastructure and environment to research in the field of Artificial Intelligence for JIIT faculty and students, the Department of CSE & IT has successfully set up and installed NVIDIA's supercomputing machine – DGX Workstation in March, 2021. It is equipped with 4 high-end volta Graphical Processing Unit (GPU) and is based on the Tesla architecture. Each GPU has approximately 5000 computation core, making the total number of available core for computation to 20,000.

NVIDIA DGX workstation is the universal system for all AI workloads, offering unprecedented computing density, performance, and flexibility. It is the world's first purpose-built AI workstation, powered by four NVIDIA Tesla® V100 GPUs.

The NVIDIA DGX Station packs 480 TeraFLOPS of performance with the first and only workstation built on four NVIDIA Tesla® V100 accelerators, including innovations like next generation NVLink™ and new Tensor Core architecture. The accelerator enables enterprises to consolidate training, inference, easy to deploy AI infrastructure, and easy analytics.

This ground-breaking solution offers the following benefits to students and the research community:

- 47x the performance for deep learning training, compared with CPU-based servers.
- 100x in speed-up on large data set analysis, compared with a 20 node Spark server cluster.
- 5x increase in bandwidth compared to PCIe with NVIDIA NVLink technology.
- Maximized versatility with deep learning training and over 30,000 images/second inferencing.

This DGX Workstation supercomputing facility is accessible to the faculty and students at the JIIT and facilitates research and development in the field of Artificial Intelligence, Machine and Deep Learning. The DGX workstation infrastructure will be incorporated in the curriculum structure of all the major departments at JIIT.

The objective of installing DGX Workstation at university premises is to target and facilitate R&D projects around AI, ML, Computer Vision, IoT, Sensors, Control Systems, Autonomous Systems, Cyber-Physical Systems, Robotics, Smart Health, Smart Cities, Bioinformatics, Drug Discovery, Data Analysis, and many others. At the same time, it will help the undergraduate and postgraduate students to learn new concepts and tools in the growing field of Artificial Intelligence.

The detailed configuration of DGX-Workstation

Components	Description
Processor	20-core intel Xeon e5-2698 v4 2.2 ghz
System Memory	256 GB DDR4
GPU	4 x GPUs (Tesla V100 SXM2)
Performance	500 Tera-FLOPS mix precision
GPU Memory	128 GB (8X32) total system
CUDA Cores	Approx. 5000 per GPU
Tensor Cores	Approx. 600 per GPU
Power Requirements	1.5KW or less with hot-plug & redundant power supply
Storage	4X 1.92 TB SSD RAID 0
Cooling	Water Cooled
System Network	Dual 10 GbE
GPU communications protocol	NVLink 2.0/ configured in hybrid cube-mesh NVLink network topology
OS Support	Ubuntu Linux
USB Port	6
Noise level	< 40 dB
Display	3X Display port, 4K resolution

CoE - Centre for Performance Modelling of Computing Systems (CPMCS)

Department of CSE & IT has established two Centres of Excellence (CoE), The Centre for Performance Modelling of Computing Systems (CPMCS) and Prayag. CPMCS is housed in CL-46 in ABB-I, JIIT Noida. This centre was initiated to provide a venue to researchers for experimenting freely and share their experiences, insights, and challenges regarding modelling, simulation and performance evaluation in all areas of Computer Science & Engineering and Information Technology. Specifically, the academic activities of this centre are focused on modelling and performance assessment & enhancement of computer networks (wired & wireless), wireless sensor networks, distributed systems, multimedia systems and techniques, databases & data mining techniques, computer architectures and processors, algorithms, social networks, software & information systems, and others.

Activities in Academic Session (2020 -2021):

Following activities were planned for 2020-2021 session:-

1. Organized workshops/seminars to update the knowledge of researchers and faculty in performance evaluation aspects.
2. To systematically introduce performance assessment studies and broad scope of this centre as a major project and dissertation domain.

CoE - PRAYAG
(A Centre of Knowledge Informatics for Sustainable Development)

Vision: Contribute towards enhanced understanding of diverse human activities with an emphasis on sustainable development through an informatics inclusive cross-disciplinary approach.

Sustainable Development: According to World Commission on Environment and Development (1987), Sustainable development means -*development which meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability has following dimensions:*

- Conservation and enrichment of physical environment and cultural heritage;
- Enhancement of the accessibility and quality of basic facilities;
- Nutrition, water supply, housing, sanitation, health care, energy etc.;
- Advancement of the support system for enhancing human's happiness;
- Empowerment and autonomy; &
- Relatedness, cooperation, and collaboration.

Informatics and Sustainable Development: The field of informatics is increasingly engaging with above mentioned three dimensions of sustainability in the solution as well as in the problem space. We seek to enhance our understanding about such engagements through multiple perspectives as well as approaches. Prayag is focused at the applications of computers that can have ecological and societal impacts. The members of Prayag encourage the faculty and students in developing solutions to the problems of sustainable development mainly, energy, climate change, environment & health etc.

Centre of Excellence in Artificial Intelligence and Machine Learning (CoE-AI&ML) and IOT (CoE-IOT)

By this year end, two more Centres of Excellence in Artificial Intelligence and Machine learning & in IoT will be established. AI and ML are playing a transformational role in every domain of human endeavour and require to be encouraged by talent and an ecosystem of innovation. The centre's goal will be to focus activities in four quadrants, namely Research, Teaching, Industrial Projects, and Entrepreneurship.

One of the major objectives of the establishment of this centres will be to promote interdisciplinary research and development activities in Artificial Intelligence and its allied fields including Machine learning, Data Analytics, Natural Language Processing, and others. These centres will aim to help the students of undergraduate, postgraduate, and doctoral research programs to gain knowledge in the field of Artificial Intelligence.

Centres of excellence will assure to prepare the students to prove technical competence in their profession by applying knowledge of AI/ML/DA/IOT for providing practical and innovative solutions to industrial as well as social problems. The Centre will seek to produce trained and skilled manpower to solve real-world practical problems and fulfil the industrial needs of engineering, healthcare, financial, R&D, and others.

Department Placements

The Department of Computer Science & Engineering and Information Technology plays an important role in creating the illustrious placement records at JIIT. It ensures the provisioning of placements by helping students via various training and brain-storming activities so that they get placed in the best national and international companies. The recent placement statistics of CSE & IT Department is highlighted below:

Placement Status CSE & IT, JIIT, Noida – 2017 – 21 B. Tech		
1	Total Eligible Participating Students	**448**
2	Total No. of Offers	**758**
3	% of Total Offers	**169%**
4	Absolute Offers	**448**
5	% of Absolute Offers	**100%**

Top Recruiters with Offered Packages

Placement Status for JIIT CSE/IT Department - 2022 Batch Top 5 Companies - Salary Package Wise			
S. No.	**Company Name**	**Salary Package**	**Number of Students Placed**
1	Google India	**INR 56.23 LPA**	3
2	Adobe	**INR 53.84 LPA**	3
3	DE Shaw	**INR 36.50 LPA**	4
4	Intuit Inc	**INR 32.82 LPA**	7
5	Amazon	**INR 32.40 LPA**	1

Placement Status for JIIT CSE/IT Department - 2022 Batch Top 5 Companies - Number of Students-Placed Wise			
S. No.	**Company Name**	**Salary Package**	**Number of Students Placed**
1	Infosys HackWithInfy - (PP, DSE & SE Profiles)	INR 8, 5 & 3.60 LPA	**56 (5+29+22)**
2	Cognizant - (GenC Elevate, GenC Next Profiles)	INR 4.25 LPA & INR 6.75 LPA)	**47(22+25)**
3	Deloitte	INR 7.60 LPA	**41**
4	Oracle Financial Software Services Ltd.	INR 8.23 LPA	**25**
5	ZS Associates	INR 12.84 LPA	**24**

Some of the Best Placed Alumni

At Industrial Level

1. Aman Sharma (2020), Google, India
2. Priya Vajpeyi (2020), Adobe, India
3. Sameer Gulati (2019), Google, Poland
4. Dipjal Chhetri (2018), Google, India
5. Sumit Bansal (2017), Amazon, India
6. Ayush Jaggi (2016), Amazon, India
7. Rohan Rawat (2016), Amazon, India
8. Anubhav Sadana (2016), Microsoft, India
9. Ausaf Ahmed (2016), Cisco Webex, India
10. Ekansh Jain (2016), Pwc, India
11. Jatin Dawar (2016) Pwc, Canada
12. Shubham Gupta (2015), Amazon, India
13. Mudit Bhargava (2013) Cisco, USA

Entrepreneurs

1. Pavit Singh Sapra (2018), founder Matchstick Studio
2. Anmol Chachra (2018), Car Rental Gateway Inc
3. Rupesh Kumar (2017), Vitonicaindia Beverages llp

Government Sector

1. Nishant Arora (2015), Ministry of Statistics and Programme Implementation, Govt. Of India

Ph.D. Awarded in Academic Session 2020 - 21

- **Anand Kumar Gupta on July 08, 2020 for thesis titled "Analysis and Improvement of Link Prediction Techniques in Online Social Networks".**
- **Madhu Khurana on September 16,2020 for thesis titled "Change Detection in Remote Sensing Images".**
- **Pulkit Mehndiratta on December 29, 2020 for thesis titled "Analysis and Detection of Sarcasm in Textual Data on Social Network Platforms".**
- **Honey Jindal on February 20,2021 for thesis titled "Enhanced Models for Analysis and Prediction of Web Navigational Data".**

Events

Department of CSE&IT organizes various Conferences, Workshops, Faculty Development Programs, Seminars, Expert talks, and Student Enrichment Programs. A large number of participation from academia and industries from all over the glob has been observed in these state-of-the-art events. Every year since 2008, the department organizes an annual International Conference on Contemporary Computing (IC3) with an objective of providing a forum to scientists and researchers, to discuss and put forward their ideas and research findings with the co-researchers from all over the world. This Conference is jointly organized by the Jaypee Institute of Information Technology, Noida, India and the University of Florida, Gainesville, USA. Despite the COVID-19 pandemic for last more than one year, the CSE&IT Department has organized a number of online events for the enrichment of faculty and students. The details of such events, held online during last one year, are mentioned below.

- One week online Faculty Development Program on "Assistive Tools and Technologies for Online Teaching and Learning" (ATTOTL-2020) has been organized by Dr. Anuja Arora from 7/27/2020 till 7/31/2020.
- ATAL online Faculty Development Programme on "Artificial Intelligence" has been organized by Dr. Devpriya Soni from 10/1/2020 till 10/5/2020.
- Faculty Development Programme on "Soft Computing Techniques and their Applications" (SCTA 2020) has been organized by Dr. Megha Rathi from 7/13/2020 till 7/18/2020.
- Faculty Development Program on "Advances in Natural Language Processing" has been organized by Dr. Krishna Asawa from 6/28/2021 till 7/3/2021.
- Online Faculty Development Program on "Innovations and Trends in Software Engineering" has been organized by Dr. Indu Chawala from 6/7/2021 till 6/12/2021.
- One week online Faculty Development Programme on "Research Aspects in Modern Analytics and Cyber security RAMACS-2020" has been organized by Dr. Anita from 7/20/2020 till 7/24/2020
- Faculty Development Programme on "Blockchain Technologies and Applications" (BCT-2020) has been organized by Dr. Mukta Goyal from 12/28/2020 till 1/2/2021
- "Hands-on: Nvidia DGX Workstation" has been organized by Dr. Ashish Mishra from 3/18/2021 till 3/20/2021

Publication Data

Research and Development plays a fundamental role in the growth of society. Here at Department of CSE&IT, faculty and students are encouraged to work on latest cutting edge technologies to improve or innovate. The efforts are reflected in the form of research articles published in various reputed journals, conferences, and book chapters. On average, more than 100 research articles are being published every year which are indexed in Scopus/DBLP/Web of Science/ EiCompendex. In last five years, more than 680 research articles have been published with total citation count of last 4 years (Google scholar) going up to 1504. During the period from January 2021 to June 2021, more than 55 research articles have been published in the leading journals, conferences, and books like IEEE Access, Applied Intelligence, Swarm Intelligence and others.

A comprehensive list of all the articles that have been published from January 2021 till June 2021 are as follows:

➢ International Journals

- A. C. Pandey, V. A. Tikkiwal, "Stance detection using improved whale optimization algorithm." in *Complex Intell. Syst.* Vol. 7, pp. 1649-1672, 2021.
- A. Choudhary, A. Arora, "Linguistic feature based learning model for fake news detection and classification," in *Expert Systems with Applications*, vol. 169, pp. 114171, 2021.
- A. Gupta, C. Gupta, "A Collaborative Effort-Benefit-Value Analysis Model to Support Requirements Reuse for Software Requirements Prioritization," *International Journal of Software Innovation*, vol. 9, no.1, pp.37-51, 2021.
- A. Kaur, A. Sinha, "Multi-Contextual Spammer Detection for Online Social Network, Journal of Discrete Mathematical Sciences and Cryptography," in *Taylor & Francis*, vol. 24, issue 3, pp. 777-786, 2021.
- A. M. Mohindra, C. Gandhi, "A Secure Cryptography Based Clustering Mechanism for Improving the Data Transmission in MANET," in Walailak Journal of Science and Technology (WJST), vol.18, no. 6, pp.8987-18, 2021.
- A. P. Singh, C. Gupta, R. Singh, N. Singh, "A Comparative Analysis of Evolutionary Algorithms for Data Classification Using KEEL Tool," International Journal of Swarm Intelligence Research, vol.12, no.1, pp.17-28, 2021.

- A. Prajapati, "A comparative study of many-objective optimizers on large-scale many-objective software clustering problems," in *Complex Intell. Syst.* vol. 7, pp. 1061-1077, 2021.
- A. Prajapati , "Two-Archive Fuzzy-Pareto-Dominance Swarm Optimization for Many-Objective Software Architecture Reconstruction," in *Arab J SciEng* vol. 46, pp. 3503-3518, 2021.
- A. Pilani, K. Mathur, H. Agrawal, D. Chandola, V. A. Tikkiwal, A. Kumar, "Contextual Bandit Approach-based Recommendation System for Personalized Web-based Services," in *Applied Artificial Intelligence*, vol. 35, no. 7, pp.489-504, 2021.
- A. Sinha, M. Rathi, "COVID-19 Prediction using AI Analytics for South Korea," in *Applied Intelligence*, pp. 1-19, 2021.
- A. Vidyarthi, A. Patel, "Deep assisted dense model based classification of invasive ductal breast histology images," in *Neural Computing and Applications*, pp.1-11, 2021.
- C. Gupta, V. Gupta and A. S tachowiak, "Adoption of ICT-Based Teaching in Engineering: An Extended Technology Acceptance Model Perspective," in *IEEE Access*, vol. 9, pp. 58652-58666, 2021.
- G. K. Nigam, C. Dabas, "Enhanced Auxiliary Cluster Head Selection Routing Algorithm in Wireless Sensor Networks," *Recent Advances in Computer Science and Communications,* vol. 14, no. 4, 2021.
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- H. Mittal, A. C. Pandey, R. Pal, A. Tripathi, "A new clustering method for the diagnosis of CoVID19 using medical images," in *Applied Intelligence*, vol. 51, no. 5, pp 2988-3011, 2021.
- H. Mittal, A. C. Pandey, M. Saraswat, S. Kumar, R. Pal, G Modwel, "A comprehensive survey of image segmentation: clustering methods, performance parameters, and benchmark datasets," in *Multimedia Tools and Applications*, pp. 1-26, 2021.
- H. Singhal, A. Saxena, N. Mittal, C. Dabas, P. Kaur, "PolyGlot Persistence for Microservices-Based Applications,"I*nternational Journal of Information Technologies and Systems Approach*, vol. 14, no. 1, pp. 17-32, 2021.
- K. Nigam, K. Godani, D. Sharma, S. Jain, "An Improved Approach for Stress Detection Using Physiological Signals," in EAI Endorsed Transactions on Scalable Information Systems, 2021.
- K. Pandey, V. Yadav, D. Pandey, S. Vikhram, "MAGIC-I as Assistance for the Visually Impaired People", Recent Advances in Computer Science and Communications, Vol. 14, Issue. 9, pp. 3030-3042, 2021.

- M. Gupta, A. Sinha, "Distributed Temporal Data Prediction Model for Wireless Sensor Network," Wireless Personal Communications, pp. 1-10, 2021.
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- M. Gupta, B. Gupta, "A Novel Gene Expression Test Method of Minimizing Breast Cancer Risk in Reduced Cost and Time by Improving SVM-RFE Gene Selection Method Combined with LASSO," in Journal of Integrative Bioinformatics, 2021.
- M. Ramzan, S Dawn, "Fused CNN-LSTM Deep learning emotion recognition model using Electroencephalography signals," in International Journal of Neuroscience, Vol. 131, Issue. 7, pp 1-15, 2021.
- P. Kumar, A. Sinha, "Information Diffusion Modeling & Analysis for socially interacting networks," Social Network Analysis & Mining, Springer, vol. 11, no. 11, pp. 1-18, 2021.
- P. Mishra, "VMShield: Memory Introspection-Based Malware Detection to Secure Cloud-Based Services Against Stealthy Attacks," in IEEE Transactions on Industrial Informatics, vol. 17, no. 10, pp. 6754-6764, 2021.
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- S. Porwal, S Mittal, "A Privacy Preserving and Efficient Multi Authority-CP-ABE Scheme for Secure Cloud Communication," in Journal of Cyber Security and Mobility, vol. 9, no. 4, pp. 601-626, 2021.
- S. Kaushik, C. Gandhi, "Fine Grained Decentralized Access Control With Provable Data Transmission and User Revocation in Cloud," International Journal of Information Security and Privacy, vol.15, no.2,pp.29-52, 2021.
- V. Garg, A. Sahoo, V. Saxena, "Enhanced textural analysis for endometrial tuberculosis identification from ultrasound images," International Journal of Information Technology, vol. 13, no. 2, pp. 657-666, 2021.
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Book Chapters

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- M. Ramzan, S. Dawn, "Bioinformatics algorithms: course, teaching pedagogy and assessment," E-Learning Methodologies: Fundamentals, Technologies and Applications. IET, 2021, pp.255.
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- R. Krishnamurthi, D. Gopinathan, A. Kumar, "Wearable Devices and COVID-19: State of the Art, Framework, and Challenges," Emerging Technologies for Battling Covid-19, 2021, vol. 324, pp.157.
- S. Aggarwal, S.S. Gaur, Manju, "Text Document Orientation Detection Using Convolutional Neural Networks," In: Sharma H., Saraswat M., Kumar S., Bansal J.C. (eds) Intelligent Learning for Computer Vision. CIS 2020. Lecture Notes on Data Engineering and Communications Technologies, vol. 61, Springer, Singapore.
- S. Agarwal, H. Bansal, "Methodical Analysis and Prediction of COVID- 19 Cases of China and SAARC Countries," In Proceedings of Second International Conference on Computing, Communications, and Cyber-Security, Springer, Singapore. 2021, pp. 581-591.
- S. Dawn, A. Jain, S. Agrawal, S. Pandey, "Towards the Development of IT-Enabled Immunization Monitoring Framework," In Epidemiological Research Applications for Public Health Measurement and Intervention IGI Global, 2021, pp. 54-68.
- S. Dawn, N. Jain, T. Gangwar, "Disease Interactome: An Assessment Case Study Based on Analysis and Measures to Predict Secondary Diseases," In Epidemiological Research Applications for Public Health Measurement and Intervention IGI Global, 2021, pp. 69-84.

Microcontroller based systems and robotics hub (µCR)

Event: Hub orientation cum project exhibition
Start Date: 13 February 2021
End Date: 13 February 2021

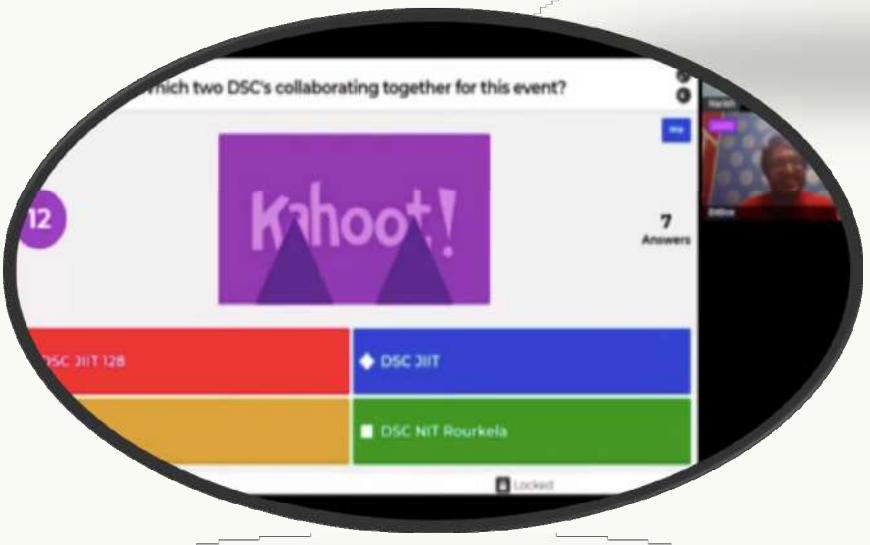
Event: Workshop on Arduino
Start Date: 02 March 2021
End Date: 06 March 2021

Event: Technophilia 2.0
Start Date: 17 April 2021
End Date: 18 April 2021

Google Developer Student's Club

Event: Android Study Jam
Start Date: 07 January 2021
End Date: 22 January 2021

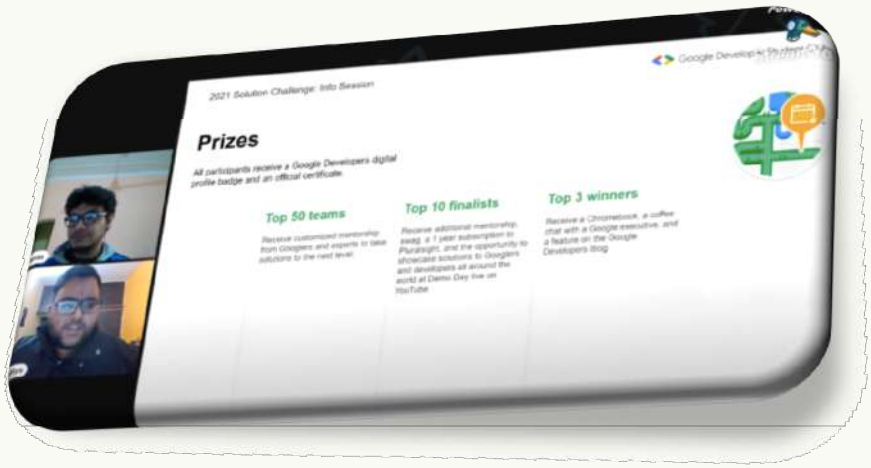
Event: Webinar on Cloud
Start Date: 13 March 2021
End Date: 13 March 2021



Event: Quiz – Lets Kahoot
Start Date: 17 March 2021
End Date: 17 March 2021

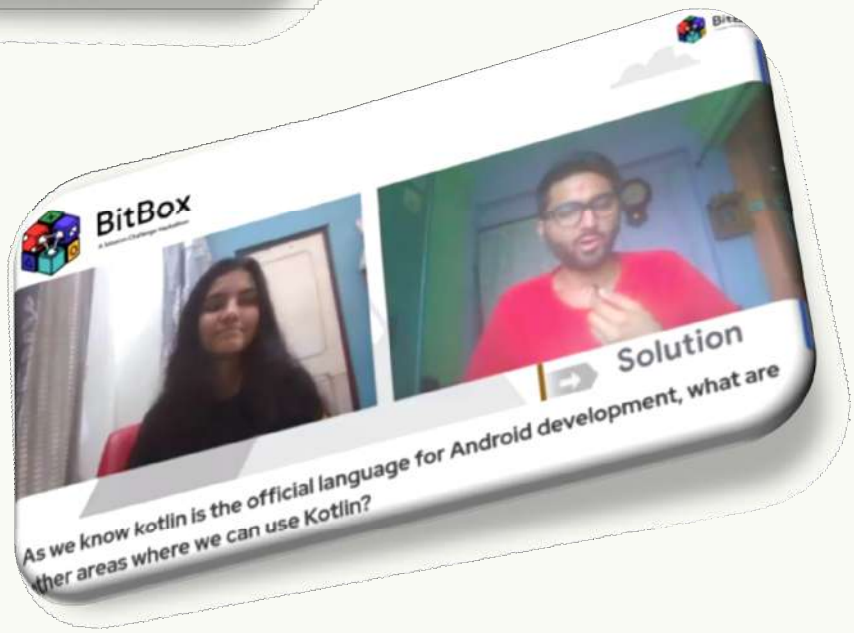
Google Developer Student's Club

Event: Webinar on AR
Start Date: 24 March 2021
End Date: 24 March 2021



Event: BitBox (Hackathon)
Start Date: 26 March 2021
End Date: 28 March 2021

Event: Kotlin (Webinar)
Start Date: 17 April 2021
End Date: 18 April 2021



Rapid Programming Hub

Event: Binary Search Discussions and Problems
Date: 10 January 2021

Event: Recursion and Backtracking
Date: 17 January 2021

Event: Dynamic Programming Introduction
Date: 7 February 2021

Event: Dynamic Programming Problems
Date: 21 February 2021

Event: Graphs
Date: 06 March 2021

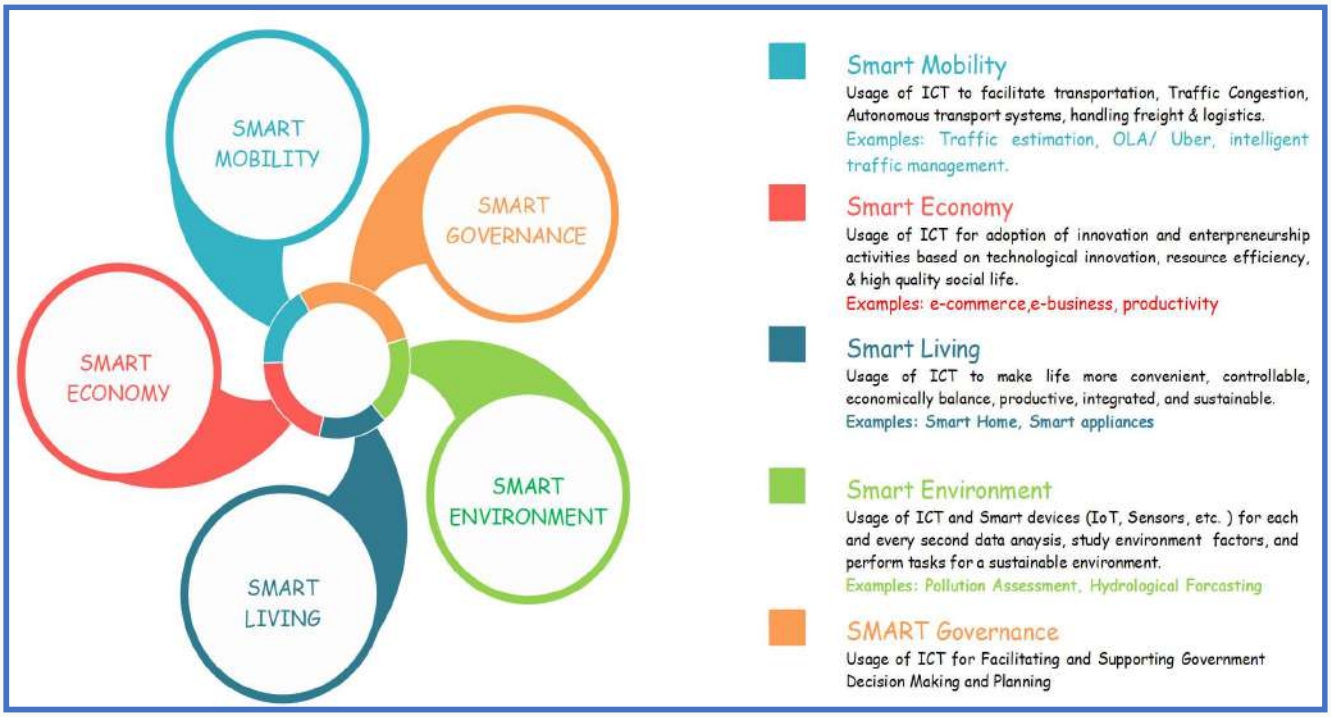
Event: Heaps
Date: 09 May 2021

Event: Segment Trees
Date: 16 May 2021

Smart City: Technology for our Own Welfare

"We shape cities, and they shape us." – Jan Gehl

Smart City colligates as a careful and planned usage of human and natural resources in a well-organized manner. The recent scenario suggests cities' upgradation by using the latest computing and ICT technologies. A properly managed and integrated Information and Communication Technology (ICT) is the only viable solution to improve the quality of life and boost urbanization by keeping a sustainable environment at reduced cost along with world-class development. Smart city systems are broadly classified as Smart Mobility, Smart Economy, Smart Living, Smart Environment, and Smart Governance. Definitions of all classifications are presented in the below figure.



The Computer Science Technologies in smart cities span across various stages from Special purpose vehicles, Home Appliance Automation, Home Security, Industrial Automation, Smart Retail Environment, Automobile Industry, and Agriculture. In light of this, Artificial Intelligence can effectively sift over large quantities of IoT devices generated Big Data to generate data-driven predictions and optimized solutions to fuel Smart City concepts. Cloud technologies will provide storage and analysis systems for the data used in everything, i.e. cloud technologies help to provide digital infrastructure. Other than these, Big Data, Social Bots, Social Media, Drone, Blockchain, Data Security, Multi-Agent systems are considered to be requisite and beneficial approaches.

In particular, Artificial Intelligence can assist smart city environments by incorporating intelligent behaviour, IoT assists by fetching sensor based real time data, Social Bots are able to produce content and interact with a human by understanding their specific requirement. As a developer, it is fair to understand which technology will play a central role in a specific problem of any category of the Smart city. Future is to build and design smart city infrastructure, sustainable environment, Applications of 'Smart Solutions' to provide a decent quality of life to citizens where Computer Science and Information Technology will be at every nook and cranny of people's lives.

Dr. Anuja Arora
Associate Professor
CSE & IT, JIIT, Noida

E-Governance for Effective Industry Institute Collaboration

Industry-Institute collaboration by way of direct faculty participation in the research and development activities of the industry is essential, particularly for rapid industrial growth of a developing country like ours. But unfortunately this much needed collaboration yet not effectively happening due to lack of governing bodies which can empower, administer, control, connect, restructure, execute, develop educational plans and serve various stakeholders in a much better way. Quite often academicians are engaged in basic research and in regular teaching schedules, while industry is busy in fulfilling the corporate objectives.

Information technology has provided powerful tools for taping up information from its sources. It is possible today to identify and access the sources of latest knowledge and to get connected with anyone, anywhere in anytime. So in order to ensure effective implementation of industry institute collaboration, having E-governance for it, can be an efficient solution.

E-Governance for Industry-Institute collaboration could help in providing speedy information dissemination, improving administrative efficiency, improving overall operational transparency and knowledge sharing in all the aspects of industry institute linkages. A very strong e-database pertaining to the industries and institutes activities, achievements, processes, uses of technologies, research findings, design solutions, implementation failures, available funds & resources, technological challenges & opportunities, available expertise, etc. can make all the stake holders self-reliant and can allow them to enjoy competitive advantage over others.

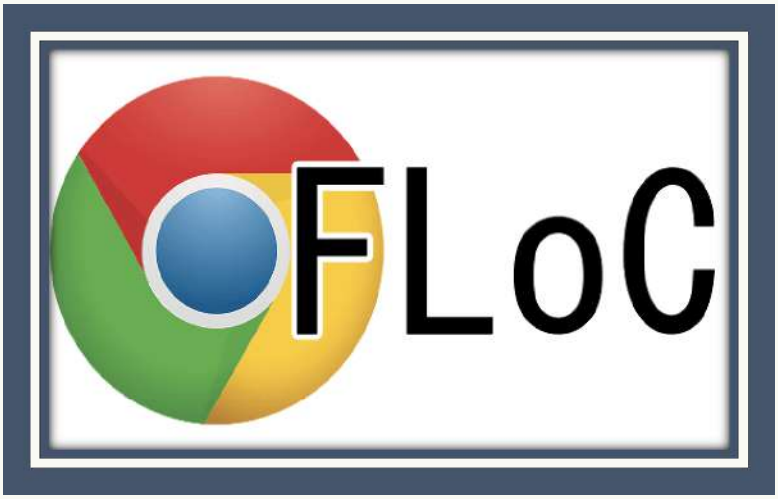
A brief account of outcomes which are successfully generated due to such E-governance in place can also be recorded and made available electronically to the others for gaining insights in their endeavors.

However, a strong political will is required for developing such E-Governance for exercising effective control and monitoring of the activities of industries and educational & research institutions operating in the field of science and technology. State Government can play a very vital role at the regional level be revamping their state ministries of industrial and technical & scientific education. All regional problems of the industries located in a state should be referred to these institutions by way of consultancy and the entire expenditure incurred on such R&D activities including the compensation to be paid to the knowledge workers engaged in these R&D activities should be shared by the industries and other individuals getting benefited by the outcomes of the R&D work.

The ministry of technical and scientific education should also ensure that every student at the first degree level of engineering should be assigned a project related with the problem of minor nature experienced by the industry. Major projects related with the modernization of Indian Industries should be assigned at the level of postgraduate studies in engineering. Scholar engaged in doctoral and post-doctoral research work in engineering should pick-up their research problems relating to the fields of innovation and creativity for developing new technologies, best of work practices, innovative approaches of management and new raw materials for cost reduction & enhancing global competitiveness of the Indian Industries.

Prof. Krishna Asawa
Professor
CSE & IT, JIIT, Noida

Google FLoC : What is it?
And should you be concerned?



For years, advertisers have been using cookies to track our activity across the web to serve us targeted ads. Apart from cookies, these days fingerprinting is also being used. Fingerprinting is more effective in tracking and identifying a user than cookies.

It helps companies create a unique profile of you by getting knowledge about the resolution and aspect ratio of the screen we use, the fonts installed on our computer, the browser we are using and the settings we have enabled. It is much more sticky and difficult to get rid of than cookies, allowing companies to track us for even months after clearing our browser storage and cache. Browsers like Firefox and Safari have already blocked 3rd party cookies for privacy, but the browser with the biggest market share Chrome has yet to block them. Google thinks that suddenly blocking 3rd parties cookies would have detrimental effects on everybody - Small business and ad agencies, users (and itself too, though it doesn't admit this). According to Google, if it blocks cookies right away, more companies would be tempted to use invasive techniques like fingerprinting which would harm the users even more.

So, Google has thought of replacing cookies with FLoC, which stands for "Federated Learning of Cohorts". It thinks this is a safer way and from March 2022 onwards, Chrome will no longer allow websites to use 3rd party cookies, making them use FLoC instead. By providing advertisers with an alternative to cookies instead of blocking them right away, Google thinks that advertisers won't resort to methods like fingerprinting and this would be better in terms of protecting the privacy of users. Also being part of a large Cohort or group, it would be more difficult for advertisers to create a unique and detailed profile about you and your interests.

The justification given by Google is that Chrome will never assign a user to a small Cohort (in order to stop unique identification of the user) and will wait till there are thousands of users in a Cohort. But there's another side to this story. As we all know Google earns the majority of its revenue through serving ads online. Using FLoC instead of cookies in Chrome and it's derived browsers, would give much more power and control to Google. It is already a huge behemoth of a company which is under many anti-trust lawsuits, and we all know how much data it already collects from it's users. Giving it more control over us by using FLoC, could be an irreversible mistake.

Another concern is that the algorithm in FLoC could create cohorts based on sensitive topics (like users who may have browser history related to substance abuse, personal hardships, support for survivors of trauma). Google is saying it will not serve those Cohort IDs to advertisers, but who knows if Google will stand up to it's commitment and identify these Cohorts or not. Also many people have pointed out that FLoC could itself be used as an advanced fingerprinting method by advertisers and make it even worse in terms of user privacy. Only time will tell if FLoC is a good decision or not as Google has already started" origin trials" of FLoC.

Nishit Anand
Enrol No.: 9918103133

The Starry Night

A blank canvas is a possibility of endless possibilities. What power does a blank piece of fabric have over an entire generation of common folk? Pick up a brush and scramble some different colors and then what. Anyone can do that. But then comes the starry night, the same blank piece of canvas, now inspiring a whole generation of artists, all because a 30 something artist decided to scramble some colors into that nothingness of fabric, just to free the canvas and his soul of some loneliness.

An average night, an average French village, an average canvas, and, an average red-haired Vincent something guy. The stars, so bright but yet so far, raging and exploding within their own existence just like Vincent. Their anguish, blazing in that silent cobalt blue skies, making their emotions felt to mankind, but to no avail. Vincent heard them, he could see the euphemism in those bright yellow stars. The violent strokes of yellow, green, and purple, in the panorama of those blue skies, made the stars and Vincent feel for a moment that they were together, it felt like the one and only true relationship in the life of a society-ridden man and planet on fire millions of miles away.

The turbulence inside the mind of a tortured artist, you wonder what it would be like? Ask the canvas. The clouds, full of turbulence in his mind, the hallucinations of those dark hills as they cast unholy darkness upon that holy light. The canvas endured it and engulfed inside it all the pain like a mother endures the wailing of her baby on a stormy night. But storms are not only for the skies, some have them buried deep inside them, surely there is not a mother for the minds of madmen. Today the canvas stands strong, an embodiment of the perfection of an imperfect man. The everlasting legacy of the man who died poor, alone with no recognition, and one sold painting under his name.

It was the starry night he wanted, but this mortal world was not where it was to be found.

In the loving memory of Vincent Van Gogh (1853-1890)

Prashant Dixit
Enrol No.: 9917103209

Split in Two

I see myself entering a different dimension
Its not another perspective as one may mention..
Real as pain
Fake as sorry
This feels
Nobody around here kneels.

Its all color no black and white
No flashbacks just a moment infinite
No noises just rhythms
It seems quite absurd
But its like a algorithm....

There exists no laws just theories
Yes reality exists but as fantasies
I see people but they ain't talking
They pass smiles and that too without stalking
I guess they haven't discovered truth or lies
Here joy is not the thing to disguise or despise
I can hardly see the logic here
Let's just take a closer look and boom, its all there..

I don't know how to describe this place
Biblical??
Magical??
Maybe both... maybe none....
Its been forever here , saw no guns
On the contrary they all offered me bread and buns...
They aren't following any rituals
Either nobody or all are spirituals...

Enough traveling as I came back where I entered
I sat on a bench making the decision for which I was never mentored
Infront of me lies what i know
Behind , all seemingly same still unknown
Split in two choices here i sit
It has to be a hit!!!
But will it really matter if I miss?

Sidharth Mohan
Enrol No.: 9919103058

Straight from the Heart

I know what's inside me
was never enough
Lost everything behind me
I'm so tired of being a rock so tough
My heart, it beats, it pumps, it hurts,
It's black like a coal
feels like a death from thousand cuts
every time I search for my soul

I really like how imperfect I am.
Just like dreams.
I want to escape this reality,
To my delusions I'll float.
Acknowledging this phantom,
A grudge against this world I will hold.

Sometimes things are not meant to be said,
it's to be understood.
Anger, pain, agony, grief
It's 'THE' world against my intensity
All I ever wanted was just to be free.

Just tears,
Little droplets of salt water that smears,
Filled with love, sorrow and my fears.
Sliding through my cheeks,
Reminding me of those two weeks.
And than they fell off like nothing,
I'm now just a hollow shell, tired, yet pretending.
My tears have dried, but my eyes are wet.
Yet I'm here with my feelings, fighting a duet.

Aryan Kumar
Enrol No.: 9919103093

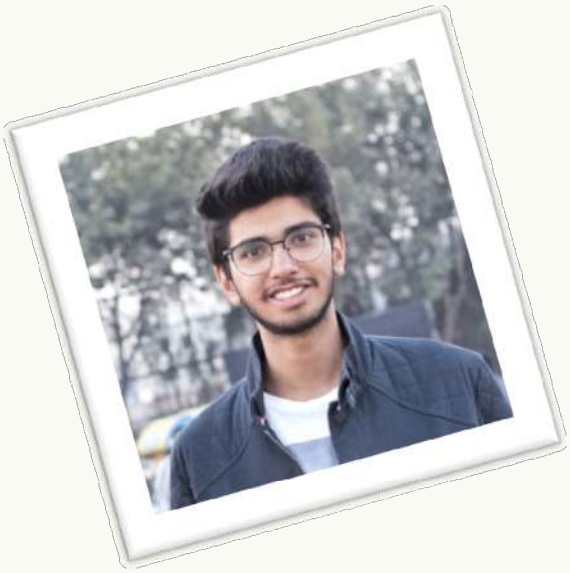
Priya Vajpeyi
Batch 2016-2020

I am JIIT Alumna from batch 2020. I completed my bachelor's of technology in Computer Science & Engineering with consistent grades & promising projects. During my stint here at JIIT, I was fortunate enough to meet some amazing professors who helped me envision my career & utilize my time to have an exponential learning curve. In my penultimate year, I have also filed a patent called Hand Gesture Explication and Lingual Extraction Nascent (HELEN), with Jaypee Institute of Information Technology.

During my final year, I got campus placed with 300% placement in Morgan Stanley as Technology analyst intern, in Adobe as Member of Technical Staff & in Infosys as System Engineer Specialist. After completing my Fastrack, I worked with Morgan Stanley & implemented a solution that significantly improved the server response time by 93.75% & further received the PPO as well. Currently, I am working with Adobe Systems, where I had got featured on the Adobe India Official Facebook page. I was also the nationwide winner for NCG Boot Camp 2020 for Java/Webtk track. In November 2020, I was chosen as the batch ambassador for the Adobe Transcend Event to represent University Batch 2020. In addition to this, my team was the submitter of the globally most up voted idea for Adobe Garage week, 2020. I was also chosen to host Mrs. Radhika Gupta- CEO Edelweiss Asset Management (EAM) for Adobe India's International Women's Day event called Raise Her Voice. Apart from the mainstream, I actively volunteer for Social Responsibility activities such as mentoring NGO kids on Personal Brand development & Public Speaking as a part of Adobe's Project Smile. I have recently received Spot Bonus for Adobe 2021 H1- Recognition. After my office hours, I work on my initiative to uplift the student community & actively mentor students on personal growth, self-help & career development. In this array, I have also collaborated with Crio.Do as a dev community mentor & have been a part of the jury for various events like Google Developer Student Club- JIIT 128 Solution Challenge, BU'hack Code4Change, etc.

Reminiscing my college days!!

Graduating in a pandemic period, yes, I belong to that infamous batch of 2020. JIIT for me wasn't just about academics and career growth, it was about all the experiences and life lessons I got from there. Starting from being one amongst the crowd, to getting placed on day one, my journey was no less than a roller coaster. Talking about academics, when I reminisce those four wonderful years of my grad, I see the set of competencies that I worked upon and gained confidence over them through the given period. With the rigorous curriculum, I was able to gain important skills that got developed at the grass-root level which plays a vital role in my life. From waking and hurrying up for the 9 AM class, to not being able to attend the same and ending up sitting in the cafe all day, that hustle felt different. To those failed mass bunks and studying just a night before the examination, this college taught us a lot. To all the amazing people and lifelong mentors whom I met there who played a really important part in shaping my career and personality, I would like to thank you for making my four years so memorable.



Rishabh Singh
Batch 2016-2020

Lalit Bhagat

Batch 2017 -2021

My preparation journey for MS has been full of ups and downs, but it was definitely worth the effort. I started my research during my third year of college under the guidance of my faculty. Apart from this, I also worked as a Research Intern at NeWS Lab, IIT Hyderabad for a year. In the summer of 2020, I completed internships at IIT BHU and Gurugram Cyber Cell. During my days at JIIT, I was able to get a patent while also getting a couple of research papers published in top international journals and conferences. With all these accomplishments, I had secured admits from numerous top universities in the USA for the MS in Computer Science program; including Arizona State University, North Carolina State University, and my "dream" university, the University of California, Los Angeles (UCLA).

Bhartendu Dubey

Batch 2017 -2021

My journey of four beautiful years at JIIT will be among one of the most memorable time of my life. Be it academics, placements, Hackathons, and other exciting opportunities, JIIT faculty have always stood up to guide me, specially my mentor. Her guidance helped me a lot to explore the field of data science, improvising myself at it and ultimately going for a career in data oriented role. Apart from academics and placements, I appreciate the way college promotes other activities which helps in overall all-round development of an individual. I consider myself fortunate enough to know many wonderful experts of Computer Science through JIIT.

CSE & IT Events After July 2021

13th International Conference on Contemporary Computing (IC3) from 5th-7th August, 2021
http://www.ic3conf.net/
https://dl.acm.org/doi/proceedings/10.1145/3474124

Faculty Development Program on Machine Learning for Internet of Things (IoT), Natural Language Processing & Computer Vision from 16th-21th August, 2021

2-week Summer School on Industry 4.0: Security and Technological aspects from 9th-21st August, 2021, technically sponsored by IEEE UP section

[UPCOMING] 2022 First International Conference on Informatics (ICI-2022), Technical Co-sponsor:IEEE UP Section, Hybrid mode, Proceedings in IEEE Digital Library and SCOPUS indexed [https://ici-conference.com/]


Sector-128,Noida
HACKOVATION
CODING BLOCKS
Date: 27th April
Time: 9:00a.m. to 5:00p.m.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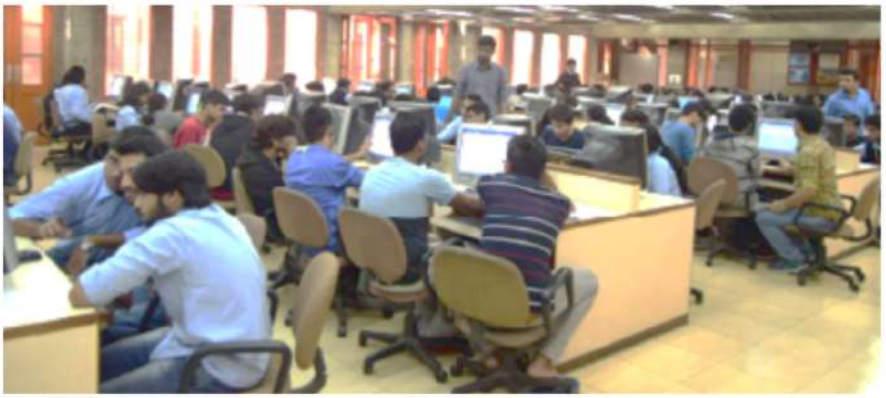

Department of Computer Science & Engineering and Information Technology

Jaypee Institute of Information Technology, Noida

(Deemed to be University under Section 3 of UGC Act 1956)