



# Bits & Bytes

June 2023 - December 2023



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A decorative graphic of overlapping, semi-transparent leaves in shades of teal and light green, positioned in the upper right corner of the page.

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# Department Events Workshops and Webinars

## Bharat Blockchain Yatra

### Kumaraguru institution holds Bharat blockchain yatra

Kumaraguru School of Innovation (KSI) at Kumaraguru College of Technology (KCT) held a Bharat Blockchain Yatra (BBY) on September 25. A total of 800 students attended the event. Speakers included Aditya Saha (Blockchain Architect, IBM), Kumaravel N (Solution Architect and Blockchain Evangelist Ford Technology Services India), Laisha Wadhwa (Head of Developer Relations, Pesto Tech), Venu Borra (Blockchain Architect, Standard Chartered Bank), and Vijay Pravin (Founder and CEO bitsCrunch). The event was organised by Information Data Systems (IDS), powered by Hedera, and supported by the All India Council for Technical Education (AICTE).



The Bharat Blockchain Yatra was an ambitious initiative in India, focused on exploring Web3 and Blockchain technologies, with its central mission being the illumination of India's journey in the realm of Blockchain. The Bharat Blockchain Yatra (BBY) event, organized by Information Data Systems (IDS), powered by Hedera, and supported by the All-India Council for Technical Education (AICTE), was hosted by the Kumaraguru School of Innovation (KSI) at Kumaraguru College of Technology (KCT) on September 25, 2023.

The event garnered significant attention, drawing a crowd of 800 participants, including students, faculties, media personnel, and industry experts from all corners of the state.

The event presented a star-studded lineup of speakers, featuring notable Blockchain Thought Leaders and esteemed Industry Experts.

Among these luminaries were

Mr. Aditya Saha, Blockchain Architect IBM;

Mr. Kumaravel N, Solution Architect and Blockchain Evangelist Ford Technology Services India;

Ms. Laisha Wadhwa, Head Developer Relations Pesto Tech;

Mr. Venu Borra, Blockchain Architect Standard Chartered Bank and

Mr. Vijay Pravin, Founder and CEO BitsCrunch.



# BHARAT BLOCKCHAIN YATRA

## Expert Talk 1: Beyond Transparency - Leveraging zk-SNARKs for Confidential Transactions

The event commenced with an insightful talk on zk-SNARKs and their role in enabling confidential transactions within blockchain networks. Attendees gained a deeper understanding of privacy-preserving techniques and their applications.

## Activity 1: Experience the Showcase of Polyversity: The World's Largest Educational Metaverse

Participants had the opportunity to explore Polyversity, the world's largest educational metaverse, gaining hands-on experience in this innovative virtual world. This activity demonstrated the potential of blockchain and metaverse technologies in education.

## Expert Talk 2: Post-Quantum Cryptography in Blockchain: Securing the Future

The second expert talk emphasized the importance of post-quantum cryptography in safeguarding blockchain networks from quantum threats. Attendees learned about the cutting-edge cryptographic techniques required to secure the future of blockchain.

## Expert Talk 3: Threshold Signatures for Multi-Party Transactions - Strengthening Security and Decentralization

This session focused on the concept of threshold signatures and their significance in enhancing the security and decentralization of multi-party transactions within blockchain networks. Attendees explored the practical applications of this technology.





# BHARAT BLOCKCHAIN YATRA

## **Expert Talk 4: Bulletproofs: Efficient Range Proofs for Privacy-Optimizing Blockchain Transactions**

The fourth expert talk introduced attendees to bulletproofs, a technique for efficient range proofs in blockchain transactions. The presentation highlighted how bulletproofs can optimize privacy while maintaining transaction efficiency.

## **Panel Discussion: Web3 Governance - Decentralized Autonomous Organizations (DAOs)**

A panel of experts engaged in a lively discussion on Web3 governance, focusing on the role of Decentralized Autonomous Organizations (DAOs). Attendees gained insights into the challenges and opportunities associated with decentralized governance structures.

## **Expert Talk 5: Crypto-economic Primitives: The Cryptographic Foundations of Blockchain Economics**

The fifth expert talk delved into the cryptographic foundations of blockchain economics, explaining the key principles and primitives underpinning the crypto-economic ecosystem. Attendees gained a deeper understanding of the economic aspects of blockchain.

## **Workshop: Navigating the Web3 Ecosystem - From Concepts to Real-World Applications**

A practical workshop provided attendees with the opportunity to explore the Web3 ecosystem and its real-world applications. Participants gained hands-on experience and practical insights into this rapidly evolving space.

## **Blockchain Business Model Canvas - How Blockchain and Web 3.0 Are Transforming Modern Business Strategies**

The event concluded with a session that examined how blockchain and Web 3.0 technologies are transforming modern business strategies. Attendees learned about innovative business models and strategies enabled by blockchain technology.



# Application Development using Django Framework and MongoDB

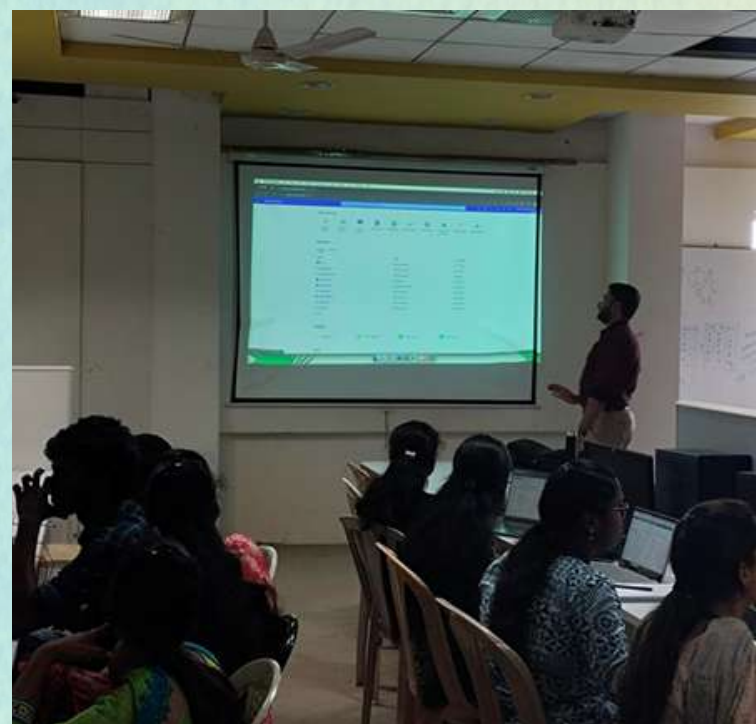
Owing to advancements in technology and job opportunities, Django is considered as an extremely valuable tool to learn and manage Big data. Industry Oriented Training on “Application Development using Django Framework and MongoDB” was organised by the Department of Computer Science & Engineering on October 18-19, 2023 for III Year CSE students. Industry experts from Pinesphere : Digital Solutions, IT Services- Ms.Kaviya and Ms.Nandini conducted hands-on session with various real time use cases. The Hands-on training enabled students to explore full stack web development framework, create application and integrate MongoDB with Django framework. Students were able to acquire rapid application development skills and understand the core concepts for industry projects in all aspects, thereby by bridging the gap between Industry and Academia. This was an initiative to kickstart prospective career opportunities in the domain of web development.





# Hands-on Training for Microsoft Azure : 900 Certification

CSE Department organized a “Hands-on Training on Microsoft Azure : 900 Certification” for the KSI Students and faculty on 19th August 2023 and 2nd September 2023 (2 Days). The event was informative and highly valued programme that aimed to provide necessary knowledge and practical skills to flourish in the exciting field of cloud computing with Microsoft Azure. Mr. Jerald Felix, an industrialist, demonstrated cloud computing concepts, its significance, and the benefits. Faculty can level-up their technical skills related to Microsoft Azure and enable them to stay up-to-date with current technology trends. Hands-on training allows to gain practical experience using Azure services, which can be valuable when explaining complex technical concepts to students. Participants both students and faculty got to know the fundamentals of Azure as well as techniques for AZ-900 certification exam preparation.





# STUDENT CORNER



- **Kanishka.T (21BCS048 )** has completed 2 Months certification course on “AICTE virtual internship on data analytics” offered by AICTE from 01.05.2023 to 07.07.2023.
- **Baalaji N V (21BCS014), Mohamed Fatheem M(21BCS068) and Mrithika C M (21BCS075)** has won first prize in Reality Experience Fest-2023 organized by KGISL group of companies , Coimbatore on 14.10.2023.
- **Rajesh Kanna R (21BCS098), Aadhavan R (21BCS001) and Sabitha C (21BCS102)** has Participated in Reality Experience Fest-2023 organized by KGISL group of companies , Coimbatore on 14.10.2023.
- **Subharanjini M (21BCS123) and Abarna V (21BCS002)** from Third year has participated in the events as part of ngineers day Celebration at Bosch Global Software Technologies (BGSW) on 15.09.2023.
- **Baalaji N V (21BCS014), Dhivakar S (21BCS020) and Mrithika C M (21BCS075)** from third year CSE has participated National Level Hackathon “ Hack the metaverse” and Won cash prize worth of Rs 10,000 conducted in IIIT-Bangalore on 15.09.2023
- **Rajesh Kanna R (21BCS098), Aadhavan R (21BCS001) and Sabitha C (21BCS102)** from third year CSE has participated National Level Hackathon “ Hack the metaverse” conducted in IIIT-Bangalore on 15.09.2023.



# STUDENT CORNER



- **Kanishka.T (21BCS048 )** has won Best outgoing student of first year for the Academic year: 2021-2022





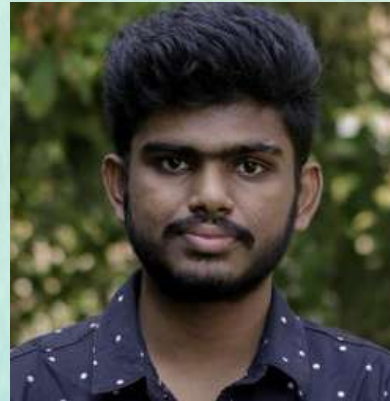
# CONGRATULATIONS



CSE department congratulates the following students and faculty who are Unity certified Associate Game Developer



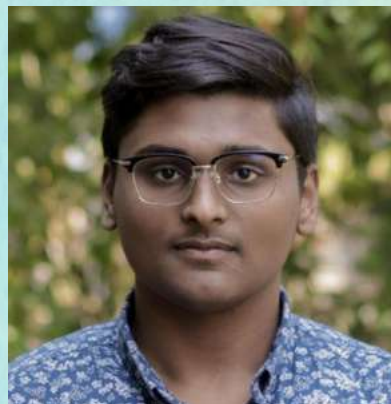
Dr. S Nithya



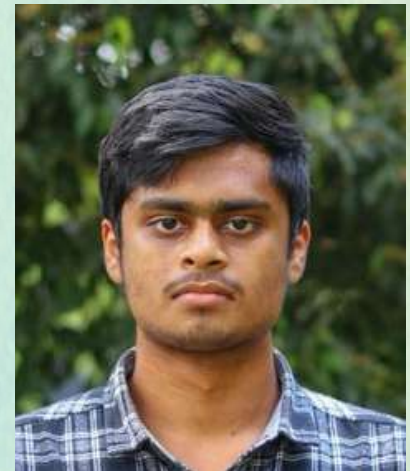
Rajesh Kanna  
R 21BCS098



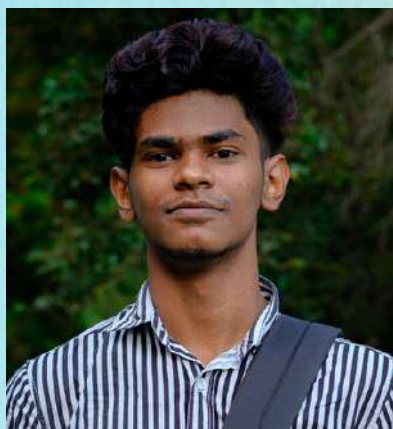
Baalaji N V 21BCS014



Mythili Sekar  
Sriram  
21BCS077



Murugesan V 21BCS076



Aadhavan R 21BCS001



Sabitha 21BCS102



# STUDENT CORNER



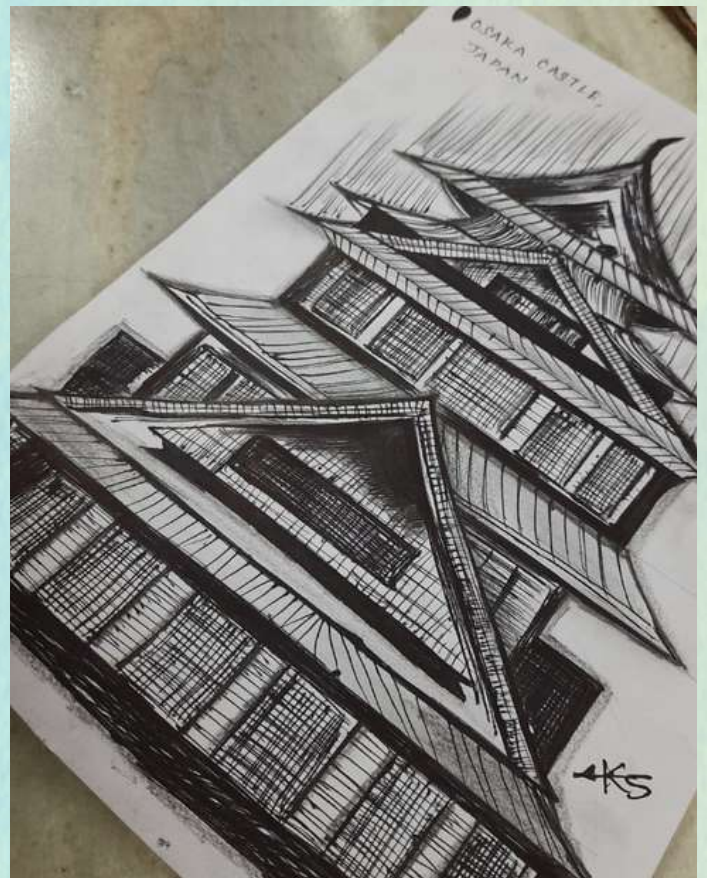
Divyadharshini.G 21BCS023



Mrithika CM 21BCS075



Kaviya Priya 21BCS053



K.Swetha 21BCS127



# FACULTY CORNER



## BOOK CHAPTER :

- Cynthia Jayapal, Clement Sudhahar, (2023), Novel Research and Development Approaches in Heterogeneous Systems and Algorithms, Chapter 6- Distributed Technologies and Consensus Algorithms for Blockchain, IGI Global Publisher, pp 100-123, ISBN13: 9781668475249.
- Cynthia Jayapal, Srinivasan, S. (2023). Healthcare System Modeling and Security Engineering. In: Raj, J.S., Perikos, I., Balas, V.E. (eds) Intelligent Sustainable Systems. ICoISS 2023. Lecture Notes in Networks and Systems, vol 665. Springer, Singapore. [https://doi.org/10.1007/978-981-99-1726-6\\_18](https://doi.org/10.1007/978-981-99-1726-6_18).
- Cynthia Jayapal. Yamuna, S.M. Manavallan, S. Devasenan, M. (2023). Detection of Mental Health Using Deep Learning Technique. In: Sharma, H., Shrivastava, V., Bharti, K.K., Wang, L. (eds) Communication and Intelligent Systems. ICCIS 2022. Lecture Notes in Networks and Systems, vol 689. Springer, Singapore. [https://doi.org/10.1007/978-981-99-2322-9\\_37](https://doi.org/10.1007/978-981-99-2322-9_37)
- Cynthia Jayapal, Sakthipriya, G. Sudhahar, J. C. Suguna, M. (2024). Intelligent Transportation System: A Review of VANET Applications for Urban Areas, Technologies, and Protocols. Sustainable Digital Technologies for Smart Cities: Healthcare, Communication, and Transportation, CRC Press. (pp. 99-112). eBook ISBN9781003307716
- Baskaran, K. R. & Kaviya, B. (2023). Stock Market Prediction Using Machine Learning and Deep Learning Algorithms. Sustainable Digital Technologies for Smart Cities: Healthcare, Communication, and Transportation, CRC Press. (pp. 127- 138). eBook ISBN9781003307716
- P Saranya, N Jeevitha, V Senthil Kumar (2022), Cognitive Wireless Sensor Networks", Cognitive Sensors, Volume 1, pp 1-27. ISBN 978-0-7503-5326-7.



- Sumathi, V, P. Kalaiselvi, R. Amritha, A. & Atshayasri, R. (2023). An Exploratory Data Analysis on Cardiovascular Disease. Sustainable Digital Technologies for Smart Cities: Healthcare, Communication, and Transportation, CRC Press. (pp. 195- 205). eBook ISBN9781003307716
- Latha, L. (2023) , Obstacle Avoidance and Image Recognition System, Sustainable Digital Technologies for Smart Cities: Healthcare, Communication, and Transportation, pp. 71-80. DOI 10.1201/9781003307716-7
- Rajini, S. (2023). Zeta – A Web Based Restaurant Suggesting Chatbot. Sustainable Digital Technologies for Smart Cities: Healthcare, Communication, and Transportation, CRC Press. (pp. 65- 71) eBook ISBN9781003307716

## **JOURNAL :**

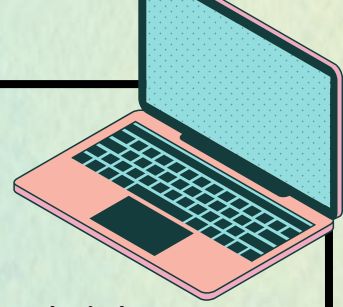
- Cynthia, J. Adithya, G. Raajakishore, R. Amudhan, S. M. (2022). Literature Survey On Certificate Authenticity Verification Solutions Using Blockchain Technology. International Journal for Science and Advance Research In Technology, 8(6), 835-838.
- M. N. Saroja and K. R. Baskaran (2022), Algorithm for Optimal Power Performance in Body Area Network in Smart Wearable Patches for Environmental Applications, Journal of Environmental Protection and Ecology 23, No 6, pp.2580–2588.
- Sathyavathi, S., Baskaran, K. R. (2023). An Intelligent Human Age Prediction from Face Image Framework Based on Deep Learning Algorithms. Information Technology and Control, 52(1), pp:245-257. <https://doi.org/10.5755/j01.itc.52.1.32323>.
- Sathyavathi, S. Baskaran, K, R. (2023) Human Age Estimation Using Deep Convolutional Neural Network based on Dental Images (Orthopantomogram), IETE Journal of Research, <https://doi.org/10.1080/03772063.2023.2165177>





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- Geethakarthis, A. , Santhiya, B. , Sumathi, V P. (2022). Household Carbon footprint Assessment across an Urban Area, Tirunelveli of India. Ambient Science, 09(3), 42-46, DOI:10.21276/ambi.2022.09.3.ta03.
- Kanagaraj, G. Subashini, G. (2023). Uniform distribution elephant herding optimization (UDEHO) based virtual machine consolidation for energy-efficient cloud data centres. Automatika, 64(3), 529-539, DOI: 10.1080/00051144.2023.2196116.
- Apinaya, Prethi, K.N. Sangeetha, M. Nithya, S. (2023). Optimized Scheduling with Prioritization to Enhance Network Sustainability in Edge-cloud Environment. Journal of Intelligent & Fuzzy Systems. 44(3), 4323-4334.
- Karthiga, M. Latha L., (2023), Clustered ensemble feature selection with M-GRU classification for efficient intrusion detection system of industrial systems, Journal of Intelligent and Fuzzy Systems, Volume 44, Issue 6, Pages 9109 – 9127, DOI. 10.3233/JIFS-222643
- G. Prema Arokiya Mary and N. Suganthi, "Detection of Parkinson's disease with multiple feature extraction models and darknet cnn classification," Computer Systems Science and Engineering, vol. 43, no.1, pp. 333–345, 2022.
- Chandrakala, D. Pradeepa, P. Meyyammai, M. Mohamed, Aakil, S. (2023, August). Personality Trait-Aware Educational Suggestion Platform. International Journal of Computer Applications. 185(29), 46-54.





## International Conference Proceedings :

- Bharathi Priya, C. Vishal, K, B. Rajendra, Shivaramakrishnan. & Devasenan, Murugan. AI based Smart Parking System. (2023). 2nd International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), Coimbatore, India, 2023, (pp. 1-6). doi: 10.1109/ICAECA56562.2023.10200147.
- Senthilkumar, V. Devasenan, M. Karan, J. Ravina, C. Sneka, V. & Kavipriya, T. Permission-Based Android Malware Identification. (2023). 2nd International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), Coimbatore, India. (pp. 1-6). doi: 10.1109/ICAECA56562.2023.10200377.
- Senthilkumar, V. Sheela, J. A. Jayashree, N. Radha, B. Saranya, P. & Devasenan, M. Integrating AI and Computer Vision for Creating a Virtual Mouse. (2023). 2nd International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), Coimbatore, India. (pp. 1-5). doi: 10.1109/ICAECA56562.2023.10200458.
- Senthilkumar, V. Jayaahari, Aditiya, M. K. Devasenan, M. Ashmita, A. Pavithiraa, S, M. & Rubhini, P. Certificate Storage and Verification using Blockchain. (2023). 2nd International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), Coimbatore, India. (pp. 1-6). doi: 10.1109/ICAECA56562.2023.10199919.
- Sumathi, V. P. Vanitha, V. & Kalaiselvi, R. (2023, June). Performance Comparison of Machine Learning Algorithms in Short Message Service Spam Classification. In 2023 2nd International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA) (pp. 1-4). IEEE.



# PLACEMENT DETAILS



ROLL NO	NAME	Salary Package In Lakhs	company
20BCS001	Abhay M	17.5	HPE
20BCS009	Amitha Das C	8	e2open
20BCS014	Ashmita A	12	Hyperverge
20BCS026	Dhanushkumar S G	12	Appviewx
20BCS027	Dhanya.S.S	9.25	Tekmedia
20BCS028	Dharunika Namagiri B V	6	ERP Roots
20BCS030	Dhyanesh M	6	Hyperverge
20BCS037	Harishini S	5	Avasoft
20BCS038	Harsh Choudhary	8	Transunion
20BCS044	John Ebin M	4.2	Mallow technologies
20BCS046	Kamal Prasath T	5.5	Maple labs
20BCS050	Karthikeyan K	6.5	Clar technologies
20BCS055	Khavya S	8	Transunion
20BCS058	Latha M H	8	Transunion
20BCS066	Vijayaditya N	17.5	HPE
20BCS071	Priyanka N	8	e2open
20BCS072	Pugalarasan M	8	e2open
20BCS073	Puja Shri Sk	6.5	Clar technologies
20BCS074	Rajsre A	5	Incture
20BCS079	Rubhini P	8	Rently
20BCS081	Saifullah N	12	Hyperverge
20BCS083	Samyuktha Rajesh	17.5	HPE
20BCS085	Santhosh Sj	6.5	Desk365
20BCS090	Sindhanai Sirpy S	4.2	Mallow technologies
20BCS091	Sneha.T	7.58	Esko graphics
20BCS095	Subbu Lakshmi Sruthi M S R	12	Hyperverge
20BCS100	Suryaprakash P	12	Hyperverge
20BCS106	Thusneem Banu A	8	e2open
20BCS212	Suman K	5	Avasoft
20BCS053	Kavimani S	4.5	UST
20BCS113	Vishnu Jayanth S	4.5	UST
20BCS052	Kashika M	5	Musigma
20BCS054	Keerthika S	5	Musigma
20BCS024	Deepthi	4.5	Accenture
20BCS051	Karthikeyan R	4.5	Accenture
20BCS105	Thivya	4.5	Accenture
20BCS112	Vishaalini RM	4	Kovai.co
20bcs077	RITHANISILAMBU	7	INTELLETYX
20BCS032	GOKUL	7	ZOHO
20BCS063	NANDANA	7	ZOHO
20BCS087	SHANKARNAARAYANAN	7	ZOHO





# INTERNSHIPS

S.NO	ROLL NUMBER	NAME	NAME OF COMPANY	START DATE	END DATE	STIPEND (in Rs)
1.	20BCS003	Abhinesh M	Unicare International, Erode	15/07/2023	30/08/2023	10,000
2.	20BCS013	Archana M	Cove Solutions, Pvt Ltd, Coimbatore	14/08/2023	29/09/2023	NA
3.	20BCS014	Ashmita A	Hyperverge Technologies Pvt Ltd, Bengaluru	01/08/2023	01/05/2024	35,000
4.	20BCS019	Badhrinathan S B	DHS Informatics, Bengaluru	24/07/2023	30/09/2023	20,000
5.	20BCS026	Dhanushkumar S G	Go Thrive Technologies, Coimbatore	01/08/2023	01/10/2023	NA
6.	20BCS027	S S Dhanya	Tekmedia Software,Coimbatore	19/09/2023	31/12/2023	15,000
7.	20BCS028	Dharunika Namagiri B V	ERP Roots Pvt Ltd, Coimbatore	04/09/2023	04/03/2024	50,000
8.	20BCS045	Joshua A	Aviontive LLP,Coimbatore	15/06/2023	14/12/2023	20,000
9.	20BCS047	Kanishha P P	Saama Technologies, Coimbatore	27/02/2023	28/08/2023	25000
10.	20BCS050	Karthikeyan K	Clar Technologies Pvt Ltd Coimbatore	01/07/2023	01/07/2024	30,000
11.	20BCS063	Nandana S P	Go Thrive Technologies, Coimbatore	01/08/2023	01/10/2023	NA
12.	20BCS055	Khavya S	Mallow Technologies Pvt Ltd Karur	12/08/2023	12/11/2023	NA
13.	20BCS072	Pugalarasan M	FRESHDIGITAL CONSULTING SERVICES PVT LTD, Bengaluru	21/07/2023	31/10/2023	10,000
14.	20BCS073	Puja Shri	Clar Technologies Pvt Ltd Coimbatore	01/07/2023	01/07/2024	30,000
15.	20BCS079	Rubhini P	Rently Software Development Pvt Ltd, Coimbatore	03/07/2023	23/11/2023	18,000
16.	20BCS081	Saifullah N	Hyperverge Technologies Pvt Ltd, Bengaluru	03/07/2023	01/05/2024	35,000
17.	20BCS083	Samyuktha Rajesh	Indian Institute of Management, Bangaluru	16/08/2023	13/10/2023	10,000
18.	20BCS085	Santhosh S J	Kani Technologies Pvt Ltd, Coimbatore	01/07/2023	30/04/2023	15,000
19.	20BCS087	Shankaranaarayanan D T	Saama Technologies, Coimbatore	27/02/2023	28/08/2023	25000
20.	20BCS095	Subbu Lakshmi Sruthi M S R	Hyperverge Technologies Pvt Ltd, Bengaluru	03/07/2023	01/03/2024	35,000
21.	20BCS100	Suryaprakash P	Hyperverge Technologies Pvt Ltd, Bengaluru	01/08/2023	01/05/2024	35,000
22.	20BCS112	Vishaalini R M	Kovai.Co, Coimbatore	25/10/2023	25/04/2024	15,000
23.	20BCS212	Suman K	Beyond Sustainability, Coimbatore	10/10/2023	01/01/2024	20,000





**"Success is the sum of small efforts, repeated  
day in and day out."**

**— Robert Collier**



**character is life**



**@kct.cse**



**Computer Science Department,  
KCT**