PRESIDENTIAL ADDRESS

Adari Bhavana-President IT department

Dear readers,

The past year has been really great for our department.

Things have changed greatly since I came to KCT in (2016).

In the forth coming months, the department association would be working on conducting events and workshops for the betterment of the students, staff & nonteaching staff of our department.

The current second years & third years would do Amazing work to and for the department and KCT as a whole. Looking forward to the great opportunities in the future, I welcome you to the pages of the department's newsletter!

Designed by
Mahesh and Vezla Vendhan
II yr IT

The two most powerful warriors are patience and time. – Leo Tolstoy, War and Peace.

DEPARTMENT ACTIVITIES

ONE CREDIT COURSES

One credit course was conducted in the month of December 2019 on <u>innovation and entrepreneurship</u> to inculcate the entrepreneurship skills in students

FACULTY DEVELOPMENT PROGRAM

Faculty Development Program was conducted in the month of July 2019 on **Edge AI** for the develop the skills of faculty

PROFILE BUILDING WORKSHOP

Workshop on **Profile building and tricks to crack competitive exams** was conducted in the month of September 2019

Time is money

DEPARTMENT ACTIVITIES

PARENTING TECHNIQUE WORKSHOP

Workshop on **Parenting techniques** was conducted in the month of December 2019

BASICS OF PROGRAMMING LANGUAGES

An Outreach programme on **Basics of Programming Languages** was conducted for the Government school students in the month of October 2019

PARENT TEACHERS MEETING

Parent Teachers Meeting was conducted to discuss the academic status of the students with their parents.

Time waits for none...

DEPARTMENT ACTIVITIES

DA INAUGURATION

KUMARAGURU COLLEGE OF TECHNOLOGY COIMBATORE.

Department Association Inauguration was conducted in the month of October 2019

Rehabilitation for sustainable future for delta farmers at Pattukottai(outreach) September 2019

Red Hat Enterprise Linux Workshop

IEEE Membership Awarness Programme (outreach) September 2019

OTHER PROGRAMMES ORGANIZED

Opportunities in Graphic Design Seminar September 2019

Research Challenges in Cyber Security seminar September 2019

Empower yourself on Data Analytics seminar September 2019

The key is in not spending the time, but investing it

PAPER PUBLICATION

Author	Title
Sumathi.V.P, Vidyasagr V, Vanitha.V	Asynchronous Learning of Personal Assistant from User Histories Stored in Cloud
S. Kanagaraj, M.S. Hema, M. Nageswara Gupta	Machine Learning Techniques for Prediction of Parkinson's Disease using Big Data
G. Prema Arokia Mary, N. Suganthi, M. S. Hema	A Recapitalization on Crypto jacking and end to end Analysis of Ransomware Attacks
K.R.Baskaran, M.N.Saroja	Human Activity Recognition using Active Learning Methodology
S. Kavitha, K.R.Baskaran, S.Sathyavathi	Tasks of Object Detection using Deep Learning Architectures
K.R.Baskaran, M.N.Saroja	Machine Learning Algorithms for Human Activity Recognition
S. Sathyavathi, K.R.Baskaran, S.Kavitha	Social Media Data Analysis using Recommendation Algorithms
J. Cynthia, H. Parveen Sultana, M. N. Saroja, J. Senthil	IoT-based Real Time Air Pollution Monitoring System
G. S. Nandakumar, L. M. Palanivelu	A Research on the Performance of the Diploma Students in the Lateral Entry Scheme of Engineering Degree Program
K.P.Thilagavathy, A.Santha, G.S. Nandakumar	Achromatic Colouring of the Central Graph of Some Special graphs

Punctuality is the thief of time

STUDENT'S CORNER

Frozen Frames

BY GURUVISHNU II YR IT

Punctuality is the thief of time

STUDENT'S CORNER

SPORTS CORNER

CRICKET

SURYA of 2nd year is a active and energetic player who scored **1000+** runs for KCT.

KICS -273 runs-100(1),50(2), **ZONE** Matches-279 runs, **Interzone** Matches-199 runs.

BALL BADMINTON

KALIRAJ of 2nd year is a budding energetic player.

On Sep 4,2019, His team won Trophy in **Anna University (Zone level) Tournament(2019-2020)** and runners in **SREC.**

Time brings all things to pass

EXCELLENCE!!

- **Keerthi Vasan K** 16BIT051 got placed in Paypal with a package of 25 LPA .
- **82.3 percent** placements.
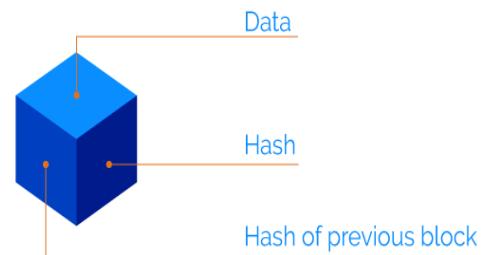- **145 companies** visited.

Some of our recruiters:

Time is the wisest counsellor

TECH-E-ZONE-BLOCKCHAIN TECHNOLOGY

Blocks hold batches of valid transactions that are **hashed**. Each block includes the cryptographic hash of the prior block in the blockchain, linking the two. The linked blocks form a chain. However, **the first block** will not have the hash of the previous block, hence this block **is called the genesis block**. Blocks **not selected** for inclusion in the chain are **called orphan blocks.** The **block time** is the **average time** it takes for the network **to generate one extra block** in the blockchain. The block time for **Ethereum** is set to between **14 and 15 seconds**, while for **bitcoin** it is on average **10 minutes**

Data

Hash

Hash of previous block

Currently, there are at least three types of blockchain networks,

A **public blockchain** has absolutely **no access restrictions**. Some of the largest, most known public blockchains are the bitcoin blockchain and the Ethereum blockchain.

A **private blockchain** is **permissioned**. One cannot join it unless invited by the network administrators.

A **hybrid blockchain** has **a combination of centralized and decentralized** features. The exact workings of the chain can vary based on which portions of centralization decentralization are used.

A **hybrid blockchain** has **a combination of centralized and decentralized** features. The exact workings of the chain can vary based on which portions of centralization decentralization are used.

The network is very secure. To add a block to a chain firstly a **cryptographic puzzle must be solved**. The computer that solves the puzzle shares the solution to all other networks on the computer.

⊞ MICROSOFT

Just recently, Microsoft have collaborated on integrating Ethereum programming language. The tech giant company has also revealed that Excel 2016 will support Bitcoin's currency format within the MS Office suite. Excel can track, calculate and analyse Bitcoin data using native Bitcoin number formatting options. Format support is currently in "development" but will offer a variety of use cases when it becomes available.

This is called proof of work. The network then verifies the proof of work and if correct, the block will be added to the chain. Making a change to any block earlier in the chain requires re-mining not just the block with the change, but all of the blocks that come after. This is why it's extremely difficult to manipulate blockchain technology.

- Akshay Ravichandran II YR IT

Time is an illusion

CAREER ZONE

AFCAT (Air Force Common Admission Test) is an entrance test for aspirants willing to join Indian Air Force as Commissioned Officer in Flying, Ground Duty (Technical) and Ground Duty (Non-Technical). The test is conducted twice a year across the country by the Indian Air Force.

AFCAT EXAM PATTERN

Exam	AFCAT	EKT (only for technical)
Mode of Exam	Online i.e. computer-based	Online i.e. computer-based
No. of Questions	100	50
Maximum Marks	300	150
Duration of Exam	2 hours (120 minutes)	45 minutes
Sections in Paper	General Awareness, Verbal Ability in English, Numerical Ability and Reasoning and Military Aptitude Test	Mechanical, Computer Science and Electrical & Electronics
Negative Marking	1 mark	1 mark

-NAVEENA II YR IT

Time is the wisest counsellor

EXTRAS

FORGED FOR LIFE!!

By Yashdeep IIIyr IT

I was lucky enough to get a sponsored innovation at protosem, at FORGE factory. I had no clue what I was signing up for. But finally I was glad that this is what I selected. The first few days in this new environment was a bit scary but also exciting at the same time. I was able to learn so much more than I could imagine. We had covered so many topics like PCB designing, 3D modelling, Working with 3D and Laser printers and so on. It was not just the technical knowledge I gathered but also the innovation concepts and the experience of managing and working with a startup. Speaking of startup's, I had a special opportunity working with startup's as it was a sponsored innovation as I had mentioned earlier. The problem statement was that "At many Industries and Oil rigs there are a set of safety protocols and measures to be followed and the current solution being followed was manual inspection and that doesn't seem very effective".We were approached by a startup named "Flutura" to build a video-analytics system to monitor these actions. I had no clue as to where we should even start exploring. But thanks to the help of the SPOCK's(Single Point Of Contact) I was able to enquire into the field of "Computer Vision". Coming from an IT background, I anticipated familiar technologies but it is not always expected to get what we are comfortable with. So my team and I left no stone unturned and delved into various technologies such as Neural Networks, Edge computing, Containerisation. We were working in an environment called "Tensorflow" and the primary language we were using was Python. We were introduced to many libraries such as "OpenCV", "Numpy", "Matplotlib" and so on. I was particularly working on Neural Networks, CNN's(Convolutional Neural Networks) to be more specific. Whenever we had a hard time and did not know where to proceed, our SPOC would come to our aid. We were working on this project for 3 months and visited the startup to get a more clear understanding on what were the conditions to be met with. I am elated with the experience gained here and hope to continue and explore more in this field.

Time spent with cats is never wasted