DEPARTMENT OF INFORMATION TECHNOLOGY

PRESENTS

HALF YEARLY NEWSLETTER



JUNE 2020

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INTRA DEPARTMENT EVENTS



VIVID 2020

The 5th Edition of National Level Project Competition VIVID 2020 was convened by Dr. T. Nagarajan, Professor & HoD, and coordinated by Dr. I. Joe Louis Paul, ASP, Dr. S. Sasirekha, ASP and Ms. R. Swathika, AP on March 13, 2020, for the students of B.E/B.Tech/M.E/M.Tech of IT/CSE and ECE from various Institutions to explore, enhance and exhibit their talent.

The event was conducted on two tracks:

Track-I

- · Image
- Video
- Speech
- . AI
- Machine Learning

Track-II

- · IOT
- Data Analytics
- Web
- Android
- Bio Informatics



Track 1 was conducted at IT Seminar Hall and Track-II at IT Conference Hall. Around 21 teams (approximately 60 students) from various engineering colleges were called for oral presentations cum demo to explain about their projects.

Panel Members:

- Dr. A. Shahina, Prof./IT, Mr. Nirjhar Roy, Al Architect, TCS and Mr. Rajkumar G, Senior Data Engineer, Chargebee Technologies (2009-2013 Batch Alumni of IT Department), acted as the panel of Juries for Track-I.
- Dr. S. Chithra, Dr. N. Bhalaji, ASP/IT, Ms. Dhanalakshmi M, Cognitive Technologies Architect, TCS and Mr. Snabak Vinod A J, Technical Manager, Cognizant (2000-2004 Batch Alumni of IT Department) acted as the panel of Juries for Track-II.

Prize Distribution:

Dr. T. Nagarajan, Prof<mark>ess</mark>or & HoD, distributed the cash awards and shields to the prize winners.

Winners:

- First Prize The project titled "Environmental Shield", presented by Mohammed Safi and Tharun from Sri Venkateswara College of Engineering, Sriperumbudur (Cash award of Rs. 15,000/-).
- Second Prize The project titled "Health Assistive Device for Multiple Disabled People", presented by R.Vigneshwar and Senthil Kumar.J from Sri Sairam Engineering College, Chennai (Cash award of Rs. 7,000/-).
- Third Prize The project titled "SURWAY UAV Route & Routine Planner", presented by A.N. Srinivasa Krishnan, Nagulan S and A. Kiran Kumar from Amrita Vishwa Vidyapeetham, Coimbatore (Cash award of Rs. 3,000/-).







HACK & TACKLE 2.0

The Department of Information Technology in association with IEEE Student Branch, organized Hack and Tackle 2.0, a 24-Hour Hackathon between 20th and 21st February 2020. The problem statements consisted of five different themes namely:

- Environment
- Healthcare
- Women's safety
- · Agriculture
- · Social welfare
- A few in the open track.



Dr. T. Sree Sharmila, ASP, Dr. V. Thanikachalam, ASP and Ms. J. K. Josephine Julina, AP, were the faculty co-ordinators who helped making the event a big success.

The entire event was conducted in two phases. The registration for phase I began on 11th January 2020 and nearly 274 teams from 45 different colleges registered. The proposals submitted by those teams underwent a blind review process and almost 50 teams were shortlisted for phase II. The registration for phase II began on 05th February 2020. A total of 28 teams consisting of 112 students from various disciplines were finalized and attended the event.

The hackathon was split into three sessions and was handled by 28 expert members from various industries namely Ajira Soft, Mr.Cooper, HCL, CTS, Freshworks, Sirius, Temenos, and CML Media Software Pvt. Ltd. who trained the teams providing valuable suggestions for improvement and evaluated the team's performance. The first session was conducted from 3PM-11PM on 20th February and second from 11PM to 7AM on 21st February. The final session took place between 7AM to 3PM on 21st February.

The main platinum sponsor, Ajira Software supported immensely from time to time in terms of financial assistance, and spent their time in providing valuable suggestions. Mr. D. Manikanda Prabhu from Ajira Software was the Chief Guest during the Valedictory function. Other sponsors include IEEE Computer Society and Paruvtham Teacher Educational Trust.

Hack and Tackle 2.0 gave the top 7 teams a cash prize ranging from Rs.30,000 to Rs.2,500. The prizes were as follows:

- Both the first and second team were from SVCE and they worked on geo tracking of waste and attention span detection and earned cash worth 30k and 20k respectively.
- The third prize bagged by the team from Bannari Amman Institute of Tech worked on AI enabled hand wash monitoring device for hospitals and got 15k as the prize amount.
- Each of the four consolation team winners got Rs.2500 each and were from Valiammai, Sri Sairam and Adhiyamaan college of Engineering.



PROCODE WORKSHOP

SSN ProCoDe conducted a workshop on Competitive Programming on 22nd February 2020. The workshop was conducted by Avinash Bharat (Currently working in Amazon and SSN Alumnus), M. S. Vignesh (Currently working in PayPal and SSN Alumnus), and Hemnath D (Final Year Student, IT Department).

A total of 43 students attended the workshop. The students were split into two groups (Beginner and Intermediate), depending on their previous experience in Competitive Programming. 15 students attended the Intermediate Session, while the rest (28 students) attended the Beginner Session.

The major topics discussed in Beginner Session were deemed essential for a debut in competitive programming. They included in-depth discussion on Time and Space Complexities, Prefix Sums and Binary Search.

The students in the Intermediate batch of the workshop were exposed to higher level topics required for competitive programming. The topics included Recursion, Dynamic

Programming and Digit DP.



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PROCODE CONTEST #1

ProCoDe, the intra-department Coding Club of Information Technology organized "ProCoDe Contest #1" on 8th April 2020. It was an Online Coding Contest based on Algorithms, Data Structures, and Problem Solving. The contest was open for first, second, and third-year students of the Department of Information Technology. The contest was conducted under the traditional ICPC rules.

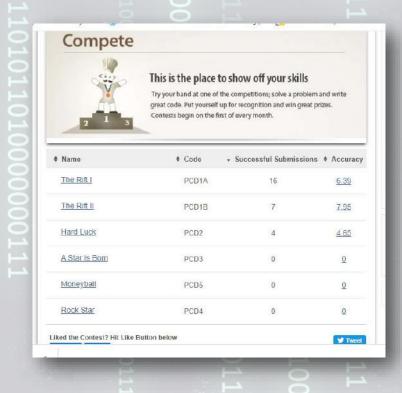


This virtual coding contest lasted for a span of two and a half hours from 6 to 8:30 pm on the 8th of April 2020. It was hosted on the online platform, CodeChef. The participants were given a total of 6 problems to solve in the given time span. The problems covered a variety of topics such as Basic Math (GCD), Prefix Sums, STL in C++, Binary Search, Knuth Morris Pratt String Matching Algorithm and Dynamic Programming.

A total of 72 students participated in the virtual coding contest. The participants included 38 students from the first and third years and as many as 41 participants from the second year alone. A grand total of 465 submissions were received from the students for evaluation.

The top two to three performers from each year were declared as prize winners. Janani. R, Padmavathi and Akshaya. V outperformed the contestants of third year, while Akarvin Raja Prajan, Harrison Vijay and Sridarshan. B were the best performers among the second years. Harisaran and Sanjay Ram. S led the score board among the first years and were also declared winners.

This contest was the first of its kind conducted by ProCoDe and was aimed to engage, motivate and challenge the students in the period of lockdown. It gave an opportunity to the students to revive and fine tune their programming skills.



ORPHANAGE TRIP

The "2020 year" began on a great note for our batch. We went for our college IV from Chennai to Bangalore and Coorg and had 3 days of unlimited fun, learnt a lot and made memories which we will cherish our whole life. It was really a ONCE IN A LIFETIME TRIP!! Among all the excitement and happiness which was filled around us, we still felt something was missing. We realized that there are people around us who aren't privileged enough to have days like ours in their life. As we wanted to do something, we planned to visit the kids of "Krupa Orphanage", Padappai, on Feb 2nd, with our leftover tour money. We really wanted to share our happiness with them and make it as a unique experience for the children.

The day started very early for us as the site was 25kms away from Chennai. We went with mixed emotions and feelings as none of us were cooks nor game conductors. In fact, many of us experienced these for the first time.

The ice breaking started with some fun games with the kids and they were bubbling with energy. And then we had an energy draining dance session with the kids. The happiness we saw in their eyes was one such thing which nothing in the world can buy us. And finally we had our BIRYANI!! And, believe me, it wasn't an easy task making BIRYANI. Before leaving we gave them a few small gifts as a token of love and the joy we saw in their faces knew no bounds.



We left with a feeling of having a bunch of bubbling little brothers and sisters. The day really went very well and it was a memorable experience for all of us. SEEING THE HAPPINESS OF THOSE KIDS GAVE US A COMPLETE FEELING.

We express our gratitude to our HoD who without any hesitation gave us the permission to go forward with this plan. Also we thank our professors who helped us through this. Finally, our special thanks to Dr. Sam J Prabu, Professor of MCC college, for his active participation and guidance throughout the event.

- Michael Suguna Kumar IT A II year









Instincts, the national level cultural fest of SSN, was held on 5th, 6th and 7th of March 2020. The three day festival saw participants coming in from various parts of the state. The theme for this year was, "Lights, Camera, Action". The entire campus was bedecked with beautiful decorations all in the spirit of celebrating the extravagant world of cinema.



The day started off with the inauguration ceremony. The crowd was very enthusiastic and excited when Jayam Ravi was announced as the chief guest. This was then followed by the release of the "Saaral (Tamil Mandram) magazine".

The day held many exhilarating events like Character Showdown, Solo Western Competition, Adzap etc. The SSN Debate Prelims were also held on the same day. The Celebrity Variety Show took place in the main auditorium which had performers from the Youtube Channel "Black Sheep". The SSN Photography Club organized a workshop on the importance of Composition. The day ended on a high with Choreo Night.





TITLE

DIRECTOR

CAMERA

The Second day started with one of the most sought after events, "Reels of Fire", which astounded the audience with each short film submission. The event was judged by well known directors, P.S.Mithran, Ashwath Marimuthu and Abinandhan Ramanujam. Pradeep Ranganathan, Director and alumnus of our college, was the guest of honour. This was followed by a variety of events like Channel Surfing, Potpourri, Treasure Hunt etc.

The day also held Design-A-Thon, a 5-hour design hackathon. The Photography club held its flagship event "LET- Let Experts Talk" for all the photo enthusiasts out there. The best photographers in the business were invited to share their experiences with all the aspiring photographers.

The day came to a close with a high energy performance from Andrea Jeremiah with her band "The Jeremiah Project". They gave a high octane performance that had the crowd on their feet singing along to every song. Actor Siddharth was also invited as a special guest for the performance.



The third and final day started with the Women's day celebration. High accomplishing women from various fields were invited to speak about their journey. Aathmika- an actress, Shravya Varma- a fashion designer, Alisha Abdullah- National racing champion, Shashaa Tirupati - Singer and Aishwarya Kalpathy - Founder of Yuva Active were invited down to the felicitation ceremony.

The day held the finals of Pattimandram and the SSN Idol. It was packed with fun events like IPL Bidding and Kollywood Quiz. The Bike show took our breaths away with their heart stopping stunts that were performed flawlessly. The end of the cultural fest was marked by the customary Lantern fest, giving the whole place a fantastical ambience.

This was followed by the much-awaited DJ Night, which ended the event on a scintillating high energy note.



INTERNALLY FUNDED PROJECTS

We thank the SSN Management for encouraging the students to take up projects by granting funds of up to Rs 72000/- to the budding researchers.

Topic: The impact of Visual Lombard Speech on Automatic Speech Recognition System

Students: S. Navaneethakrishnan

K. Krishnaraj

B. Harikrishna

1 Year UG

Guide: Ms. S. Uma Maheswari

Budget: Rs 24,000/-

Topic: Development of Deformable Nano Photonic Crystal for application as active colour change based sensor and

tuneable reflectors

Students: T. R. Harsha - IT

SricharanSundarbabu - Mech

S. Nithin- CSE

I Year UG

Guide: Dr. Prita Nair - Physics

Budget: Rs 30,000/-

Topic: The impact of Throat Microphone Lombard Speech on Automatic Speech Recognition System

Students: V. Saagar Prasad

B. Rakshana

A. S. Bhuvaneswar

B. Karthika

1 Year UG

Guide: Ms. S. Uma Maheswari

Budget: Rs 18,000/-



FACULTY CORNER



FELICITATIONS

Ms. N. Radha, Assistant Professor and Research Scholar, IT Department, successfully defended her

thesis titled "A multimodal Ph.D approach to develop robust speech recognition systems". Her thesis on building focuses а speech automatic recognition system using a multimodal approach, by combining the complementary evidence present in the multiple modalities through which speech is expressed. complementary These evidences of speech, as recorded

using a normal microphone, a throat microphone, and a camera are combined for the recognition of the highly confusable Consonant-Vowel (CV) units of Hindi language.

Mr. R. Vinob Chander, Assistant Professor and Research Scholar, IT Department, successfully

defended his Ph.D thesis titled "Application Interoperability for Internet of Things". His standard proposed а based Application based Interoperability Architecture (IoT-AIA). The architecture makes use of Zens and best practices that are also part of the proposed works in this research. The proposed architecture Zens, and best practices implemented using application protocols: SOAP, REST(HTTP),

REST (CoAP) to test their feasibility on IoT environments for Application Interoperability with encouraging results on different device types and connectivity patterns.

CONGRATULATIONS!!

PUBLICATIONS

- The following journal paper of Dr. T. Nagarajan, Professor & HoD, IT, has been accepted for publication in IEEE Journal of Selected Topics in Signal Processing (IF 6.68): T. A. Mariya Celin, T. Nagarajan, P. Vijayalakshmi, "Data Augmentation using virtual microphone array synthesis and multi-resolution feature extraction for isolated word dysarthric speech recognition".
- The following journal paper of Dr. T. Nagarajan, Professor & HoD, IT, has been accepted for publication in IEEE Transactions on Audio, Speech and Language Processing: T. Lavanya, T. Nagarajan, P. Vijayalakshmi, "Multi-level Single-Channel Speech Enhancement Using a Unified Framework for Estimating Magnitude and Phase spectra"
- Dr. P. Vasuki, ASP, IT published the following journal article: P. Vasuki, Saambavi and Vijesh Joe, "Construction and Evaluation of Tamil Speech Emotion Corpus", National Academy Science Letters, DOI: 10.1007/s40009-020-00907-1.
- Dr. T. Sree Sharmila, ASP, IT published the following journal article: Roselin Kiruba. R & Sree Sharmila. T, "Secure data hiding by fruit fly optimization improved hybridized seeker algorithm", Multidim Syst Sign Process (2020). https://doi.org/10.1007/s11045-019-00697-w, [IF: 2.338]
- Mr. V. Arul Kumar, AP and Dr. N. Bhalaji, ASP published an article titled "Resource Scheduling Algorithms for Cloud Computing Environment: A Literature Survey" in Springer Lecture Notes in Networks and Systems, volume 89, pp. 1059-1069.

- Ms. S. Vidhusha, AP, IT published the book chapter titled "Inter Hemispherical Investigations on the Functional Connectivity in Controls and Autism Spectrum Using Resting State fMRI" co-authored by Dr. A. Kavitha in the Innovations, Algorithms, and Applications in Cognitive Informatics and Natural Intelligence, chapter 9, pp. 169-186.
- Dr. N. Bhalaji, ASP, et.al. published article titled "Modern Parking Business Using Blockchain and Internet of Things (IoT)", in Springer Advances in Intelligent Systems and Computing, Volume 1056, pp. 527-535
- Ms. S. Vidhusha, AP, IT, has published the paper titled "Effect of Virtual Reality on the EEG Sub-Band Frequency Powers of Autistic and Control groups" co-authored by Chrisilla S, Anna Masciantonio, Divya B & Kavitha A in Sixth International Conference on Biosignals, Images, and Instrumentation (ICBSII), organized by Department of BME, SSN College of Engineering, Chennai.
- Mr. V. Arulkumar, AP, IT published a journal article titled "Start to Finish Automation Achieve on Cloud with Build Channel: By DevOps Method", published in Procedia Computer Science, PROCS 37572, Elsevier publication. Jan 2020.
- L. K. Pavithra & Dr. T. Sree Sharmila, ASP, IT published the paper titled "A new multi-level radial difference encoded pattern for image classification and retrieval" in Multi dimensional Systems and Signal Processing.

- The manuscript entitled "Reconfigurable FET-Based SRAM and its Single Event Upset Performance Analysis Using TCAD Simulations" authored by Nisha Justeena and Dr. R. Srinivasan, Professor, has been accepted in Microelectronics Journal, Elsevier.
- R Geetha and Dr. S. Karthika, ASP, have published the manuscript titled "Will I Regret for This Tweet? -Twitter User's Behavior Analysis System for Private Data Disclosure" in The Computer Journal, published by Oxford University Press on behalf of the British Computer Society.
- The manuscript entitled "Enhanced Image captioning system for Ophthalmologist for eye disease classification using the symptoms of tissue" authored by V. Sivamurugan, ASP and Dr. P. Indumathi, Professor, MIT Campus, Anna University has got accepted for publication in the Journal of X-ray Science and Technology, IOS Press.
- The manuscript titled "Reconfigurable Silicon Nanotube FET Using Numerical Simulations", authored by Nisha Justeena Arockiam, Ambika, and Dr. R. Srinivasan, Professor, IT, has been published in the Journal of Computational Electronics, Springer.
- The following journal papers of Dr. A. Shahina, Professor, have been accepted for publication:
- i) John Wesley, A. Nayeemulla Khan, and A. Shahina, "Phoneme classification in reconstructed phase space with convolutional neural networks", Pattern Recognition Letters, Volume 135, July 2020, pp. 299-306. (IF: 2.810)
- ii) S. Uma Maheswari, A. Shahina, A. Nayeemulla Khan, "Lombard Speech Effect on Speech Systems", accepted in Archives of Acoustics. (IF: 0.917).

- Dr. P. Vasuki, ASP, published the following paper in Journal of Experimental & Theoretical Artificial Intelligence, Tailor and Francis (IF: 2.111): P. Vasuki and C Aravindan, "Hierarchical classifier design for speech in the mixed-cultural environment"
- Ms. N. Radha, AP, published the following paper: N. Radha, A. Shahina, A. Nayeemullakhan, published a paper titled "Visual Speech Recognition using fusion of Motion and Geometric Features" in Procedia Computer Science Journal, Vol. 171, pp 923-933, June 2020.
- The manuscript entitled "An enhanced OCT image captioning system to assist ophthalmologists in detecting and classifying eye diseases" authored by V. Sivamurugan, ASP and Dr. P. Indumathi, Professor, MIT Campus, Anna University has got accepted for publication in the Journal of X-ray Science and Technology, IOS Press.
- Dr. N. Bhalaji and Vignesh. M (Alumni), published an article titled "MOOCVERSITY - Deep Learning Based Dropout Prediction in MOOCs over Weeks" in Journal of Soft Computing Paradigm (JSCP), Vol.2 (3), pp.140-152.

PAPERS REVIEWED

- Dr. I. Joe Louis Paul, ASP, reviewed a manuscript for Wireless Personal Communications (Springer) Journal.
- Dr. I. Joe Louis Paul, ASP, reviewed a manuscript for Arabian Journal for Science and Engineering (Springer) Journal.
- Mr. V. Arulkumar, AP, reviewed a manuscript for KSII Transactions on Internet and Information Systems journal.

EXTERNAL PROJECT PROPOSALS

 Dr. T. Nagarajan, Professor & HoD, IT, submitted a project proposal, entitled "Standalone, Domain Specific, Speech to Speech Translator for English and Indian Languages" to IMPRINT IIC, as a consortium partner along with IIT Dharwad (lead), IIT Kharagpur, IIT Guwahati, IIT Jammu, IIT Bhubaneswar, IIIT Dharwad, IIIT Hyderabad, DAIICT Gandhinagar, NIT Patna, Amrita Vishwa Peetham.

The following faculty members have submitted the project proposals Under the Scheme of Project Related Grant (PRG) to TamilNadu State Council for Science and Technology

- Project Title: Prediction of Learning Behaviour for Students of Online Courses.
 Investigators: Dr. S. Mohanavalli & Dr. S. Kavitha
- Project Title: IoT Based Smart Irrigation System using Machine Learning Techniques. Investigators: Dr. S. Sasirekha, Dr. S. Mohanavalli & Dr. S. Kavitha
- Project Title: Flood Monitoring and Prediction System – Next Generation Investigators: Dr. I. Joe Louis Paul & Dr. S. Sasirekha
- Project Title: Early Detection and Management of Brown Plant Hopper (BHP) in Paddy Crops Investigators: Dr. I. Joe Louis Paul & Dr. S. Sasirekha
- Project Title: Restoration and Monitoring of Wetland in Chennai Lakes using IoT Analytics in Collaboration with Care Earth Trust of Chennai Investigators: Dr. S. Karthika & Dr. N. Bhalaji

- Project Title: Vision-based Gesture Recognition for Educating Hearing Impaired People Investigators: Dr. T. Sree Sharmila & Ms. J. K. Josephine Julina
- Project Title: An Intelligent Delayed Auditory Feedback Aid to reduce Stuttering using Emotion Recognition Investigators: Dr. N. Sripriya & Dr. S. Poornima

The following faculty members have submitted the project proposals to SERB-CRG, DST:

- Project Title: Query-Based Dynamic News Summarization of Broadcast Videos Investigators: Dr. N. Sripriya, Dr. S. Poornima & Dr. S. Mohanavalli
- Project Title: Intelligent Posture Correction System for People with Sedentary Lifestyle Investigators: Dr. S. Mohanavalli, Dr. N. Sripriya & Dr. S. Kavitha



ACHIEVEMENTS

- Dr. T. Nagarajan, Professor & HoD, IT, attended a Board of Studies meeting as Anna University nominee for B.Tech (IT) and M.Tech (Data Science) at Rajalakshmi Engineering College, Chennai.
- Dr. T. Nagarajan, Professor & HoD, IT, attended a Board of Studies meeting as Anna University nominee at Department of IT, Kongunadu College of Engineering and Technology, Trichy.
- Dr. S. Chithra, ASP, IT, was a session chair in the International conference ICACT '20 held at Stella Maris College, Chennai.
- Dr. N. Bhalaji, ASP, IT, attended a Board of Studies Meeting of Department of Information technology, SRM Valliammai Engineering college, Chennai.
- Mr. V. Arulkumar, AP, participated in 2 days Research Oriented FDP on Contemporary Research on Information Centric Networks at Madras Institute of Technology, Anna University, Chennai.
- Dr. N. Bhalaji, ASP, and Dr. S. Chithra, ASP, attended the launch of "Nambikkai inaiya Mandram" at Tamil Nadu E-governance agency, Chennai.
- Dr. S. Karthika, ASP, attended the Certified Virtual Classroom Teacher Program organized by Classle SKILLNET in association with the Chennai Chapters of IEEE, ACM & CSI.
- Mr. Arulkumar. V, AP, attended International Workshop on Big Data Analytics organized by Department of CSE, SSNCE

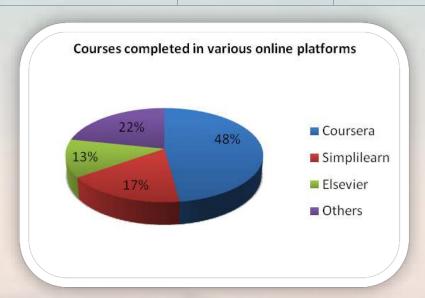
- Dr. N. Bhalaji, ASP, Dr. S. Chithra, ASP, Dr. S. Karthika, ASP, and Dr. T. Shanmughapriya, AP, attended the National workshop on "Deep Learning for Cyber Security" organized by SETS, Chennai.
- Dr. T. Sree Sharmila, ASP, participated in the webinar on "IEEE Region 10 Educational Activities Challenge 2020" conducted by IEEE Region 10 Educational Activities Committee.
- Dr. N. Sripriya, ASP, has participated in the Two Days instructor-led Live online workshop on Machine Learning and Artificial Intelligence using Covid-19 Virus Data Analysis organized by Finland Labs in association with National Social Summit, IIT Roorkee.
- Dr. P. Vasuki, ASP, attended Online 2 Day ML and Al Using Covid-19 Virus Data Analysis Workshop organized by IIT Roorkee and Finland Labs.
- Dr. P. Vasuki, ASP, attended the E-Sessions on Functional Style with JS organized by Department of IT, SSNCE.
- Dr. I. Joe Louis Paul, ASP, participated in Global Higher Education Summit 2020, organized by Centre for Industry Relations & Industry Academia Cell, Aarupadai Veedu Institute of Technology, Vinayaka Mission's Research Foundation, Deemed to be University, India.
- Dr. N. Sripriya, ASP, attended a Two days International Seminar on Art of Writing Scientific Articles, Funding Proposal and Patent organized by Chennai Institute of Technology.
- Dr. T. Sree Sharmila, ASP, IT conducted the viva-voce examination for her full-time research scholar Ms.
 L.K. Pavithra.

ONLINE COURSE CERTIFICATIONS DURING LOCKDOWN- COMPLETED

SI. No	Name of the faculty	Online platform offering the course	Name of the course
1.	Dr. T. Nagarajan	Coursera	Neural Networks and Deep Learning
2.	Dr. T. Nagarajan	Coursera	Improving Deep Neural Networks: Hyperparameter tuning, regularization and optimization
3.	Dr. T. Sree Sharmila	Coursera	Neural Networks and Deep Learning
4.	Dr. V. Thanikachalam	Coursera	Neural Networks and Deep Learning
5.	Dr. S. Chithra	Coursera	Cybersecurity and the Internet of Things
6	Dr. S. Chithra	Coursera	Introduction and programming with IoT Boards
7.	Dr. S. Karthika	Coursera	Neural Networks and Deep Learning
8.	Dr. S. Karthika	Udemy	OSINT: Open Source Intelligence Level 2
9.	Dr. S. Karthika	Simplilearn	Introduction to Cyber Security
10.	Dr. N. Sripriya	Coursera 27	Natural Language Processing in TensorFlow

SI. No	Name of the faculty	Online platform offering the course	Name of the course
11.	Dr. N. Bhalaji	Kerala Blockchain Academy (IIITM, Kerala and Intel)	Certified Blockchain Associate
12.	Dr. N. Bhalaji	Simplilearn	Introduction to Cybersecurity
13.	Dr. N. Bhalaji	Simplilearn	Introduction to Internet of Things
14.	Dr.N.Bhalaji	Simplilearn	Introduction to Artificial Intelligence
15.	Dr. N. Bhalaji	Bitdegree	An Interactive Solidity Tutorial
16	Dr. N. Bhalaji	Coursera (University of Michigan)	Blockchain and Cryptocurrency
17.	Dr. N. Bhalaji	Udemy	Certified Blockchain Developer
18.	Dr. N. Bhalaji	EC-Council (Codered)	Basics of Ethical hacking and Penetration testing
19.	Dr. N. Bhalaji	Researcher Academy - Elsevier	How to Identify right journal to publish
20.	Dr. N. Bhalaji	Researcher Academy - Elsevier	Making Academia - Industry Collaboration work

SI. No	Name of the faculty	Online platform offering the course	Name of the course
21.	Dr. N. Bhalaji	Researcher Academy - Elsevier	Certified Peer Reviewer
22.	Dr. I. Joe Louis Paul	Coursera	Cybersecurity and the Internet of Things
23.	Dr. I. Joe Louis Paul	Coursera	Cybersecurity and the X-Factor
24.	Dr. I. Joe Louis Paul	Coursera	Internet of Things: How did we get here?
25.	Dr. I. Joe Louis Paul	Coursera	Fundamentals of Network Communication
26	Dr. I. Joe Louis Paul	Coursera	Al For Everyone

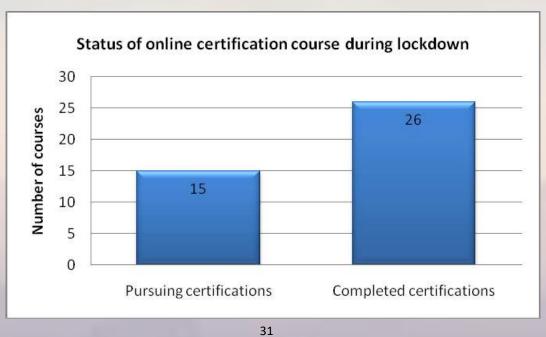


78 students have completed courses in Coursera during the lockdown.

ONLINE COURSE CERTIFICATIONS DURING LOCKDOWN- ONGOING

SI. No	Name of the faculty	Online platform offering the course	Name of the course
1.	Dr. S. Chithra	Coursera	Introduction to C# programming and Unity
2.	Dr. S. Karthika	Coursera	Al for everyone
3.	Ms. J. K. Josephine Julina	Coursera	End-to-End Machine Learning with TensorFlow on GCP
4.	Ms. J. K. Josephine Julina	Coursera	Machine Learning for Business Professionals
5.	Dr. N. Sripriya	Udemy	Deep Learning A-Z: Hands-on Artificial Neural Networks
6	Dr. K. R. Uthayan	Coursera	Full Stack Web Development
7.	Dr. K. R. Uthayan	Coursera	Design Thinking for innovation
8.	Dr. N. Bhalaji	Coursera	Bitcoin and Cryptocurrency Technologies
9.	Dr. N. Bhalaji	Upgrad	Blockchain Technology
10.	Mr. V. Arulkumar	Coursera	Introduction and Programming with IoT Boards

SI. No	Name of the faculty	Online platform offering the course	Name of the course
11.	Mr. V. Arulkumar	Coursera	Google Cloud Platform fundamentals: Core Infrastructure
12.	Mr. V. Arulkumar	Coursera	Google Cloud Platform Big data and Machine Learning Fundamentals
13.	Mr. V. Arulkumar	Udemy	Learn Python Programming Masterclass
14.	Dr. S. Sasirekha	Coursera	Server-side Development with NodeJS, Express and MongoDB
15.	Dr. S. Sasirekha	Coursera	AWS Fundamentals: Building Serverless Applications



GUEST LECTURES DELIVERED

- Dr. N. Bhalaji, ASP, IT, acted as a chief guest and inaugurated NITTTR Chandigarh sponsored short term course on "An Enterprise Perspective on Blockchain Technology" at Sri Krishna College of Engineering and Technology, Coimbatore and handled a session on the same day.
- Dr. N. Bhalaji ASP, delivered a Keynote talk on "Exploring Cryptocurrencies in Academic Perspective" in Eighth International Conference on Mathematical Computer Engineering held at VIT Chennai.
- Dr. N. Bhalaji, ASP, delivered a talk on "Handshaking of AI and Cybersecurity" during the Online Faculty Development Programme on Recent Technology 2020, organised by Department of EIE, SRMIST, Chennai in collaboration with ABE Semiconductor Design.
- Mr. R. Vinob Chander, AP, was the organizer and resource person for the online event e-sessions on Functional Style with JS.
- Dr. N. Bhalaji, ASP, delivered a talk on "Sneak peek on Blockchain" under Tech Talk Combo organised by St.Joseph's College of Engineering, Chennai.
- Dr. N. Bhalaji, ASP, delivered a talk on "Cryptocurrency" organised by Department of CSE, Vels university in Collaboration with Computer Society of India.
- Mr. Kabilan. K, AP, delivered a lecture titled "A journey towards IoT" in web-logue series 1 conducted at Joseph Arts and Science College, Thirunavalur, Kallakurichi DT, Thiruvalluvar University, Vellore.

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- Mr. Kabilan. K, AP, delivered a lecture titled "IoT programming using Raspberry Pi and IoT evaluation" in web-logue series 1 conducted at Joseph Arts and Science College, Thirunavalur, Kallakurichi DT, Thiruvalluvar University, Vellore.
- Dr. N. Bhalaji, ASP, handled a webinar titled "Handshaking of AI and Cybersecurity" organised by St.Joseph's Institute of technology, Chennai.
- Dr. N. Bhalaji, ASP & Mr. K. Kabilan, AP, conducted webinar on "Introduction to block chain" at Joseph Arts and Science College, Thirunavalur, Kallakurichi DT, Thiruvalluvar University, Vellore.

GUEST LECTURES ORGANIZED

- Dr. N. Sripriya, ASP, and Dr. S. Poornima, ASP, have conducted a one day seminar on "Big data Management -Tools and Applications" with 98 participants and sessions handled by Mr. Sundharakumar, AP, SSN SASE, and Mr. Rajkumar, Chargebee technologies.
- Ms. R. Swathika, AP, IT & Mr. A. Sandana Karuppan, AP, IT organized the following guest lectures:
- 1. DB Optimization: A brief exposure to the world of containerization and docker was presented by Mr. Muthupalaniyappan, Associate Technical Consultant, Vuram Technologies and Mr. Sai Vignesh S, Full stack Developer, Navis.
- 2. Microservices and DevOps handled by Mr. Ramprasath R, Technology Manager Cloud Services and Mr. Pradeep K, Technology Lead -DevOps at OptiSol Business Solutions Private Limited.

• CSWG Talk Series:

Talk Series Date	Talk on	Expert Member
27-05-2020	Open Source	Dr. S. Karthika,
	Intelligence	ASP, IT, SSNCE
	Vulnerability and Penetration Testing	Mr. Mihir V Haryal , Senior Manager, Global Product
		Management,
		EC-Council
03-06-2020	Unlocking Privacy	Dr. T. Shanmugapriya , ASP, IT, SSNCE
	Digital Forensics and Incident Management – An overview of Abandoned future	Dr. Harish Ramani , Chief Executive & Technology officer, Tevel Cyber Corps Private Limited, Chennai
10-6-2020	Phishing mails and Ransomware	Mr. R. Ravishankar , Assistant Vice President, K7 Computing, Chennai
	Demystifying	Dr. N. Bhalaji,
	Blockchain	ASP, IT, SSNCE
18-06-2020	Mobile Phone	Ms. R. Santhya,
	Security	Founder & Director, Alfa, Beta Gamma, Coimbatore
	Cyber Risks in IoT	Dr. S. Chithra,
		ASP, IT, SSNCE

WEBINARS AND FDP'S ATTENDED DURING LOCKDOWN

MAY

- Ms. S. Vidhusha, AP and Ms. J. K. Josephine Julina, AP attended the webinar on Effective conduct of online classes organized by Sri Eshwar College of Engineering.
- Ms. S. Vidhusha, AP and Ms. J. K. Josephine Julina, AP attended the ACM Industry webinar on AI/ML/Big Data Analytics: When will System Software Catch up?
- Dr. I. Joe Louis Paul, ASP, and Dr. S. Sasirekha, ASP, attended the webinar on Technology in Education for NextGen after COVID-19, organized by Department of Information Technology in association with Consortium for Technical Education, Loyola-ICAM College of Engineering and Technology, Chennai.
- Ms. J. K. Josephine Julina, AP attended a National Tech Day Webinar – 2020 organized by IEEE Industry Applications Society.
- Dr. I. Joe Louis Paul, ASP, attended GEForce Webinar on Technical Knowledge on Graphics Cards for Gaming, Artificial Intelligence (AI) and Deep Learning, organized by Department of Information Technology, Sri Sairam Engineering College, Chennai in association with GEForce NVIDIA
- Ms. J. K. Josephine Julina, AP, attended the webinar on Awareness of IEEE Awards organized by IEEE Madras Section.
- Mr. Arulkumar. V, AP, attended the webinar on Recent Trends in High Performance Computing conducted by dept of ECE.
- Ms. S. Vidhusha, AP, attended 3 day FDP on Virtual Reality and Augmented Reality organized by Sri Sairam Engineering College.

- Dr. I. Joe Louis Paul, ASP, and Dr. S. Sasirekha, ASP, Ms.
 J. K. Josephine Julina, AP, attended the webinar on
 Trends in Artificial Intelligence: A Modern Perspective
 organized by St. Joseph's College of Engineering, IEEE
 CS Madras, ACM Chennai and Wiley India
- Dr. I. Joe Louis Paul, ASP, and Dr. S. Sasirekha, ASP, attended the webinar on Research Directions in IoT and Fog Computing, organized by CSI in association with ACM India, IEEE CS, and IEEE TEMS.
- Mr. Arulkumar. V, AP, attended online FDP on DevOps and AWS organized by Sriram Engineering college, Chennai.
- Dr. I. Joe Louis Paul, ASP, participated in the International Faculty Development Program on Disruptive Technologies organized by Industry Academia Cell in association with Department of Electronics and Communication Engineering, Centre for Industrial Relations & Institution Innovation Council, Aarupadai Veedu Institute of Technology, Vinayaka Mission's Research Foundation, Deemed to be University, India.
- Dr. S. Poornima, ASP, Ms. S. Vidhusha, AP and Ms. J. K. Josephine Julina, AP attended the 3 day FDP on Recent Technology – 2020 organized by SRM Institute of Science and Technology.
- Dr. I. Joe Louis Paul, ASP, Dr. S.Sasirekha, ASP, Ms. N. Radha, AP, Mr. A. Sandana Karuupan, AP and Mr. V. Arulkumar, AP, Ms. S. Vidhusha AP and Ms. J. K. Josephine Julina AP attended the 5 day FDP on Artificial Intelligence, Machine Learning and Deep Learning organized by CMR BlackBuck Engineers Pvt. Ltd.
- Ms. S. Vidhusha, AP and Ms. J. K. Josephine Julina, AP attended the 3 day FDP on Agile Methodology organized by St. Joseph's College of Engineering.

- Ms. J. K. Josephine Julina, AP attended the webinars Reshaping the Intelligent System using Computer Vision organized by Saveetha Engineering College.
- Dr. S. Sasirekha, ASP, and Ms. J. K. Josephine Julina, AP attended the webinars Neoskilling for Digital transformation and the AI revolution organized by IEEE Madras Section
- Dr. N. Sripriya, ASP, attended the webinar on Deep Learning using Python hosted by Panimalar Institute of Technology in association with Pantech E-Learning
- Mr. Arulkumar. V, AP attended the webinar on Computing Paradigms conducted by ACM Chapter and School of Computing Science.
- Ms. S. Vidhusha, AP and Ms. J. K. Josephine Julina, AP attended the webinar on Artificial Intelligence and Machine Learning with Chat Bot organized by Saveetha Engineering College
- Ms. J. K. Josephine Julina, AP attended the webinar on Artificial Intelligence Demystified organized by Wiley India.
- Dr. N. Sripriya, ASP, Dr. I. Joe Louis Paul, ASP, and Dr. S. Sasirekha, ASP, and Ms. J. K. Josephine Julina, AP, attended the ACM Industry webinar on AI for India and Beyond
- Dr. S. Poornima, ASP, attended a webinar on object tracking using ML and python organized by Pantech solutions.
- Ms. J. K. Josephine Julina, AP attended the webinar on Machine Learning an Exploratory Tool: Key Concepts and Programming organized by CSI, ACM Chennai, IEEE CS.
- Mr. Arulkumar. V, AP attended the webinar on Machine Learning Algorithms for Real World Applications conducted by NRI Institute of Technology

JUNE

- Dr. I. Joe Louis Paul, ASP and Dr. S. Sasirekha, ASP, attended the webinar on "To Fight COVID-19 using Robotics & IoT", organized by Department of Computer Science and Engineering, Mahendra Engineering College, Namakkal District.
- Dr. N. Sripriya, ASP, has attended a webinar on "Data Visualization through online pedagogy" organized by Sathyabama Institute of Science and Technology, Chennai.
- Ms. J. K. Josephine Julina, AP, attended the following events:
- ⇒ Webinar on "Gesture Recognition" organized by Dept. of ECE, Vardhaman College of Engineering.
- ⇒ Web seminar on "Art and Challenges of Writing Papers for IEEE Transactions" organized by RVCE SB, IEEE Bangalore Section.
- Dr. I. Joe Louis Paul, ASP and Dr. S. Sasirekha, ASP, attended the webinar titled "Patent Act, Drafting, Filing System, and Challenges in India", organized by Internal Quality Assurance Cell (IQAC), RMD Engineering College, Chennai
- Dr. I. Joe Louis Paul, ASP, and Dr. S. Sasirekha, ASP, attended the webinar on "Industrial IoT and Cybersecurity", organized by Chennai Chapters of IEEE CS, ACM & CSI.
- Dr. I. Joe Louis Paul, ASP, attended the webinar on "Introduction to eLearning Content Creation" organized by CSI, ACM & IEEE CS in collaboration with the ETU team of CDAC Mumbai.
- Dr. S. Poornima, ASP, attended a webinar on "Big Data and Covid19", organized by McGrawHill Education.
- Dr. N. Bhalaji, ASP, attended the following events:
- ⇒ Webinar titled "Heartful Leadership: Transforming Education and Supporting Sustainability" Organised by IIHMR University.
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- ⇒ Webinar titled "Demystifying Risks Vs Opportunities of Industrial Innovations using Forge Innovation and Venture Rubric" organised by Forge Accelerator, Coimbatore.
- Ms. J. K. Josephine Julina, AP, attended the webinar on "Introduction to eLearning Content Creation" organized by CSI, ACM & IEEE CS in collaboration with the ETU team of CDAC Mumbai.
- Dr. N. Bhalaji, ASP, attended a webinar on "Online learning" conducted by University of Sunny Buffalo, USA.
- Mr. V. Sivamurugan, ASP, IT attended the following events:
- ⇒ Webinar on "Connected Products Nxt Gen IOT" organized by SCSVMV & Pantech E-Learning.
- ⇒ Zoom meeting on "Guidelines for administering open book exams handled by Prof. R. Ramanujam (Institute of Mathematical Sciences) and Prof. Madhavan Mukund (Deputy Director and Dean of Studies, Chennai Mathematical Institute).
- Dr. S. Poornima, ASP, Dr. N. Sripriya, ASP, Ms. N. Radha, AP, Ms. J. K. Josephine Julina, AP, attended the International workshop on "Art of Writing Scientific Research Paper" organized by the Department of Chemical Engineering, SSN College of Engineering.
- Dr. I. Joe Louis Paul, ASP and Dr. S. Sasirekha, ASP, attended a Seven Day Online Short Training Programme on "Development of Research Proposals and Funding Opportunities", organized by Tirumala Engineering College, Narasaropet, Guntur District, Andhra Pradesh.
- Dr. I. Joe Louis Paul, ASP, Dr. S. Sasirekha, ASP, and Ms. J. K. Josephine Julina, AP, attended the "Certified Virtual Classroom Teacher Program", organized by Classle SKILLNET in association with the Chennai Chapters of IEEE, ACM & GSI.

- Ms. J. K. Josephine Julina, AP, attended an online workshop on "Deep Learning" organized by IEEE PIT SB in association with Coding Blocks.
- Dr. I. Joe Louis Paul, ASP, Dr. S. Sasirekha, ASP, Ms. S. Vidhusha, AP and Ms. J. K. Josephine Julina, AP, attended a One Day Workshop on "Applications of Artificial Intelligence for Smart Technology", organized by the Department of ECE, SSN College of Engineering.
- Dr. Malathy E.M, ASP, Ms. N. Radha, AP, Mr. A. Sandana karuppan, AP, Ms. S. Vidhusha, AP and Ms. J. K. Josephine Julina have attended a 3-day FDP on "Computer Vision using Convolutional Neural Networks", organized by Anurag University and Blackbucks.
- Mr. V. Arulkumar, AP, attended 5 days online FDP on "Data visualization using Tableau" organized by Dayananda sagar college of Arts and Science, Bengaluru.
- Ms. J. K. Josephine Julina, AP, attended a workshop on "Indian Sign Language" organized by Bhumi NGO.
- Mr. V. Arulkumar, AP, attended Seven Day Webinar cum Workshop on Data Science organized by Department of Computer Science and Engineering, Amrita College of Engineering and Technology, Nagercoil, in association with Hebeon Technologies.
- Dr. S. Karthika, ASP, participated in International Summit on Data Science and AI organized by Robert Bosch Centre for Data Science and Artificial Intelligence, IIT Madras.
- Ms. S. Vidhusha, AP, attended the International Seminar on Cognitive Computing & ADHD organized by IEEE Computational Intelligence society and co-sponsored by the IEEE Madras Chapter.
- Mr. V. Sivamurugan, ASP, attended a seminar on "Thermal Camera Applications For Medical" organized by PHYTEC Bangalore.



INTERNSHIP AT CARNEGIE MELLON UNIVERSITY

From May 18th, 2020, I had the privilege and pleasure of joining an online internship conducted by Carnegie Mellon University, Pittsburgh, USA. The goal of this internship was to make all the students in the internship learn on-demand skills like Machine Learning and Data Science. Under the Alan Turing award winner Dr. Raj Reddy, along with 3 other professors from Carnegie Mellon University, I had a wonderful opportunity to enhance my skills in Machine Learning and Deep Learning.

There are a total of 14 students participating in the internship program, from India and abroad. We were divided into 4 teams of 3 to 4 members each, and were to work with this team for the duration of the internship.

The internship was divided into 3 tracks, which are conducted parallelly. Track 1 is handled by Dr Naveena, who teaches ML concepts. Track 2 is a research paper reading track, where teams are assigned research papers on Tuesdays, doubt clearing sessions are held on Fridays and on Saturdays each team presents the research paper to the faculty in a span of 30 minutes. Final track is ML tools learning, which is conducted by Mr. Vamsi Vemuru, who emphasises on the importance of practice in learning.

Everyday from 6:30 pm to 8 pm we attend virtual classes. Each track has its assignments and deadlines. Apart from individual assignments we also have team assignments. Fortunately, I also got a chance to work on a small project in CMU with a stipend of \$70.

During this internship, I got to interact and correspond with students of different communities and age groups, which was a novel experience. Keeping up with different time zones was a challenging task in itself. Though I was initially shy and laid back, I learnt to be bolder and more confident in due course.

All the faculty members were very amiable and within reach at all times, despite their busy schedules. They found ample time to interact with us, correct our mistakes and help profusely to learn many new things.

I made many good friends during this internship who challenged me with new perspectives every step of the way. I deem it my good fortune to get an opportunity to work with people like them.

The internship is set to end on 30th June 2020, and I am sure I will have gained enough exposure to ML concepts to lay the foundation to my future endeavours. This internship was made real after a lot of planning and effort by many people during the time of international lockdown. I specifically would like to thank SSN college management and CMU management for giving me this wonderful opportunity to learn new things. I will always cherish the memories made during this internship.

- SRINIDHI. S IT B III YEAR



INTERNSHIP AT ASTRA ZENECA

I started my Data Science internship at AstraZeneca in May 2020. I got this internship through an ML hackathon they had conducted in IIT Madras at Shaastra in January. I met some data science heads from AZ's lab in Cambridge at the hackathon. My friends and I ended up winning the hackathon, and we connected with the AZ employees at the event on LinkedIn. One thing led to another, and I ended up interning here. I actually don't regret being rejected by Microsoft now, because I'm loving this Data Science Internship! I've met some amazing people through this experience.

This is my first time working at a company. They are working on pretty interesting projects. Apart from developing a vaccine for COVID-19, they are working on understanding Genome sequences, and Molecular Pharmaceutics (which is what I'm working on). I've been able to experiment with a lot of new concepts like Graph Neural Networks, and dealing with Molecular structures and encodings. This internship taught me what data science is actually about. It is NOT about building complicated models. Data Scientists have to use the data they're given to increase the impact it has for the company. Impact can be in the form of analysis, interesting observations, visualizations, and maybe... just maybe, a model.

In my case, predicting a molecular property with high precision will enhance the company's decision making capability in prioritizing virtual sets of compounds for synthesis or testing. I'm really proud of the company I'm working at, and the contributions they're making to improve humanity's response to diseases.



- SRINATH V IT B III YEAR

MY JOURNEY TO AN INTERNSHIP

My internship search began from the month of March (I would advice to start searching from February on the safer side). I had done a few Deep Learning based projects and had no internship experience before hand. I used LinkedIn to contact various start ups and companies that was related to my field of interest. I also applied for the IIT summer Internship program and NIT Summer Program. I was delighted to be offered an internship from a NIT Professor. I had to work under him for 2 months on-campus. The possibility of working on a research based internship thrilled me.

However, Corona pandemic had to set in. The Professor contacted to let me know that the internship stands cancelled and the colleges are closed. I was disappointed. I couldn't believe that I had to start applying for internships again.

I convinced myself to look out for remote internship opportunities, during the pandemic. Again, I contacted start ups and a few of them responded. They gave me few tasks to complete along with the deadline. They wanted me to solve Kaggle (a great portal for people interested in Data Science) contests and provide my score. I got a lot of rejection mail.

However, around March end Wipro Limited (I had applied for the internship around March) replied. They took a look at my resume and made me explain my projects. A few weeks later, I was offered an 8 weeks internship. I am extremely glad to be a part of the company and push myself to learn new stuff. This is a huge learning experience for me and I am very excited.

Since the internship is remote, they shared their remote access cloud and that has made it possible for me to contact my mentor and share codes. I did not get the opportunity to meet my team and interact with them. However, I am extremely thankful to be able to work from my home with technological advancements and stay connected with the team. Hoping to learn a lot out of this internship.



- HARSHINI. V IT A III YEAR



ALUMNI CORNER



HOW TO BE A VALUABLE DEVELOPER LESSONS FROM SILICON VALLEY

It's always a great pleasure for me to introduce Sripaul (2005-2009 Batch alumni of our dept) to you. We know that our alumni who so dearly love our SSN. How can we get them involved? It's really a way for them to give back, as well as an attempt to help young students and ease their transition into the real world". Being passionate, positive, and persevere, this is what I have seen as Sripaul during his journey as a student of IT. Apart from excelling in academics, Sripaul has always shown interest in developing new skills, I hope it is continuing even now... Thank you for sharing your thoughts to our budding engineers.

-- Dr. I. Joe Louis Paul, Associate Professor

It has been around 7 years since I landed in Silicon Valley and have worked on fintech all this while, I've had this wonderful opportunity to work on some of the complex products and challenges. Being in the valley, I've come to meet a lot of tech enthusiasts and creators and have learned quite a bit talking to them. Today I pen down what I think are my lessons of being a valuable developer. Note, I consciously chose the word valuable instead of cool or awesome.

Making choices early

Coming out of college, and landing your first job feels great. But little did I realize that early 1 to 2-year choices goes a long way.

Right from college, I had a deep interest in coding and I couldn't put my head in work without seeing code. I requested the concerned people and backfired seriously that I had to quit my first job in a few months to move onto greener pastures. It was one of those tough times but looking back it was totally worth it. I got to see CODE day in and day out. But was a services this company and soon I realized the difference between being a part of services vs product company.



It started becoming clear that my ambitions and skills may be better utilized in a product company and so I transitioned again despite being given awesome opportunities in services. This again is a key decision I made and I strongly regard it as my best.

You must make decisions very early. To be in code or away from code or a totally different profession has to be made sooner than later. In case it goes wrong, you fail fast and recover which wouldn't weigh you down so much.

Be that person who can move a mountain

Often there are these kinds of projects that come along and I seem to be sitting amongst other developers and managers where an effort or complexity is discussed and most people in the room say this wouldn't work or rather this takes too much time, tough to pull it through, etc. But I've found that sometimes diving into such situations and taking ownership even though having little information has helped my growth a lot.

For example, when I had just landed in Valley, we had a major database corruption because of buggy code and it needed manual correction. Remember this is millions of



records we are talking about and it has to be updated with integrity in parallel to being active. I've seen even the best get of developers little a nervous because in fintech if you screw up, it might go to an extent that someone would report about this error, and quite simply you may create news. I had no idea what this situation is but I knew it was some kind of a safe script that to correct millions has records. And there

recollecting all the PL/SQLs and sent out a fine script that solved them all. Was it a flashy task? NO. Was it tiring? YES. But at the end of the day, I was too valuable to my organization and that script is still being referred to! So be that person who can move a mountain and set standards.

Always bring more to the table

Say you work among 4 to 10 engineers and you roll out a product to live. What happens at end of delivery? celebrate, probably monitor and troubleshoot issues, and then move But what on. differentiated me from the rest of developers is that I've always had the urge to do something more. It could be touah understand what's that "more" depending on the of type

projects and technologies you use. But there is definitely a "more" out there.

For example, we were migrating a product from ver 1.0 to ver 2.0. A whole group of developers worked through for months. I noticed an opportunity to do some analytics on top of it so I rolled out a tool using grafana and overnight the team can visualize the progress performance, etc. (Truth be told, I was merely trying to learn grafana that day). The next day, nothing else mattered and that tool became the standard for tracking the ramp. That became my "more" and made me valuable.

Let go of your favorite language

As much as you love to code, very soon you might take some language(s) as your favorite. I was too. I loved ASP .Net and would prefer that over any other framework. But then, in reality, using a single language simply won't work unless you want to be a framework developer as in core contributor in the forum (although I think you still need to be aware of other ecosystems). Oftentimes, my fellow developers stick to their familiar technologies whereas I had kept my options open. Having familiarity with multiple languages and tech stacks are like having a jetpack on you. You can easily fly around various projects and bootstrap things making you too valuable.

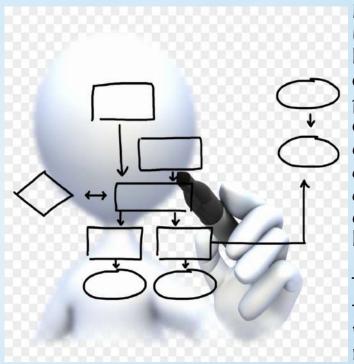
Flashy things count, but it's those boring and tough one line fix that gets you far

People hate maintenance and like to switch to the next big project and be on limelight. This is quite natural. After all in the software development, paining the Golden Gate Bridge is quite normal (although people like to call it, I am doing it in an extensible way). Every piece of code you write will be rewritten in the next 5 to 8 years if not sooner. So it's ok to not make it so extensive that you spend years in development.

While the tech stack keeps evolving, very few people realize that someone has to get their hands dirty to clean up the legacy monstrous code. Its tough, boring, and might break flows here and there. But flashy things don't flash without legacy dying. Be that person who can be both.

For example, I would spend weeks together coding a new flavor of the Product but also kill the old code taking deprecation in parallel rather than an afterthought. It not only helps you compare and release a bug-free product but appeals to the management for saving all the cost of killing legacy. Cutting the wire is after all equally fun as creating new components. Make deprecation a habit but don't overdo it.

Write those boring tech documents!



Let's be honest, no developer likes to write documents. We hate having to draw diagrams over and over again just to present it to execs. But, it's the only way to communicate and connect with the management and people who make decisions. So, it has to be compelling and I learned it the hard way.

There used to be this testing framework in ours where it was virtually impossible to really have a functional test suite.

But, here I was trying to be different and developer something I thought would be valuable. But until I put that in a document and represented it with some crazy algebra, it was never really understood beyond my fellow developers. Funny story, I often wonder where do we use linear equations, and in one of my projects I had to use it to see if 2 Civics + 3 CRVs + 1 Jazz would fit a truck of size C. So there you go, 2x+3y+1z=C. Represent with math if possible. It helps you prove what you are doing objectively and decreases people from judging your solutions subjectively.

That's the trick. You got to do it all. Explore tools like structurizr.com and swimlanes.io. They make documenting a bit more fun than regular ones.

Binge watch udemy.com!

How much we love to binge-watch series online. Likewise, for the past few years, I take time to binge-watch courses on udemy.com. It has some of the amazing trainers like Stephen Grider and Maximilian Schwarzmueller. You could literally master JavaScript / Node just with these 2 people and become proficient so easily. Not just these, there are tons of other valuable resources including YouTube. Binge watch them! Although you may not know where you'll put them to use immediately, on a longer run, it sets you apart with immense knowledge.

I hope these lessons would help you bootstrap on things I wish I'd known when I started a career in software development. Cheers!



Sripaul Chidambaram Asokan SSN IT (2005-2009) Member, Technical Staff 1 PayPal

Dr. P. Vasuki, ASP, & Dr. N. Bhalaji, ASP, organized an online Alumni interaction titled "Ask Anything with Malaikannan". The speaker was Mr. Malaikann (2004 Batch) and he has received the "Distinguished Alumnus of SSN" award for the year 2019-2020.



LOCKDOWN - A SILVER LINING?

The history of our world is no doubt eventful. The Irish plague, the 2 major world wars, and many more events have splashed crimson on the pages of our history. But as civilizations became more sophisticated and socially connected, the probability of such drastic events happening was quite low, or so they thought.

The dawn of the new decade brought about a crisis the world never anticipated. The epidemic of COVID 19 spread from China to the entire world, affecting millions of people across the globe. This disease spread from person to person so rapidly, that it led to the death

and suffering of many before any measures could be taken to control it.

As the need to maintain distance from one another increased, most of the industries took a hit either in productivity or in employee health. Transport was put on hold, so was the whole

entertainment industry. People were advised to stay at home and not step out except for the bare minimum requirements. This concept of doing nothing to stay safe was received with mixed feelings.

In India, the concept of lockdown was taken seriously, unlike many other nations. The initial wave of lockdown was enforced with strict conditions and disciplinary action was taken for people flouting the rules. The whole nation came to a standstill.



All institutions, be it education, transport or work, were closed down immediately. Though there were people who ignored the rules, the majority of the nation stayed home.

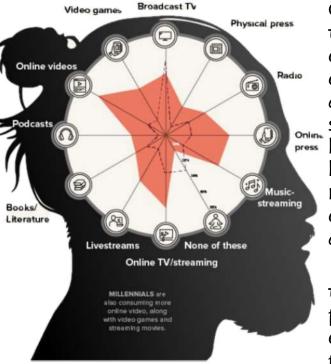
At first, though the lockdown seemed like a welcome break for many, there was inconvenience as routine was disturbed and many precautions had to be taken at all times.

As the lockdown continued, many companies faced economic troubles. Also, the entertainment industry like malls, movie theatres started heading towards a slump, due to obvious reasons.

Seems like a bad time right? It is, no doubt. But, every cloud does have a silver lining. The darker cloud of COVID19 might even have a silver aura, if one looks at it right. Didn't get it? No problem. It might seem as if the world is coming to an end under the influence of a tiny virus, but one must not miss appreciating the positive effects it has brought about. From debuting into the virtual world to ticking a few items off the bucket list, people have been far from idle.

Everyone must have surely noticed the boom in the use of technology. Be it facetiming just to keep in touch, or conducting workshops and conferences, people are looking at every medium possible to stay connected to the world. Applications such as Zoom, Google Meet, Google Duo, Webex and WhatsApp's video call feature, have gained momentum. Most companies started off with the mandatory 'Work from Home' reluctantly, but looking at the success rate, many companies are suggesting the continuation of this idea even when the lockdown is removed.

The need to maintain an office is no longer an issue and the employees can also be provided with an allowance to secure bandwidth to work from the comfort of their home.



Online Education has become the thing of the day. With all classes and assessments being conducted online, students are able to keep up with their studies, even as they relax at home. Many online classes have come up to encourage new hobbies such as painting, craft, music for kids and adults alike.

Cooking has become one of the favourite pastimes of people. The restriction of eating out has encouraged people to take a peek and

stock their larder with delicious stuff.

Entertainment? Nothina all! worry at to Streaming applications like Netflix, Amazon Prime, Hotstar, Youtube, etc have left no stone unturned in keeping audiences entertained. So that the subscriptions after much SO lockdown are in millions, in a single country.

Incidentally, the lockdown has unlocked technology for various strata of the society. A large number of farmers are participating in virtual 'plant clinics' to clarify queries related to farming activities, something which was considered 'out of reach' to them. Various apps like 'Aarogya Setu' have been launched to take precautionary measures against the pandemic.

Also start ups incubated under various educational institutions are taking off as innovative ideas to service the society are being implemented.

The lockdown has given an opportunity for families to spend 'real' quality time with each other. A break from work/studies has opened up the door to creative ideas and stress free time. This is a huge advantage especially for those working individuals who barely get time off work.



Staying at home has given an opportunity to reconnect with friends and family, virtually at least.

On the societal level, communities have come together and have expressed solidarity in the fight against the pandemic. Doctors, medical workers, social workers and the police force have taken upon themselves the mighty task of keeping the citizens safe.

Whether it is the police spreading awareness or the doctors braving the disease and treating patients, these groups have attained the honour of being called the 'warriors'. Their contribution to the betterment

of the society will never be forgotten.

Though the world is going through a difficult time, one must not overlook the positive aspects for they give us hope and strength to stay strong and fight against the pandemic.

Stay Home Stay Safe!!

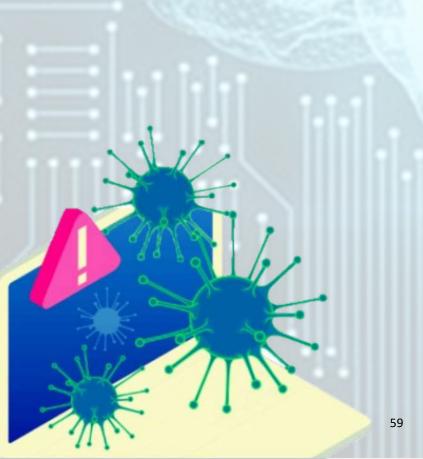


- SOWMYA. K IT B III YEAR



Zinger

TECHNICAL ARTICLES





ZINGER

The need to maintain social distancing in the period of lockdown has given rise to the need of remote transactions and maintenance of businesses. Every commercial business is now turning wholeheartedly towards complete digitization of their daily routines. But building a mobile or web application from the scratch, that too on a short notice is a tedious process. This is where Zinger comes into the picture.

Zinger is an Open Source Framework for building Hyperlocal Delivery Mobile and Web applications. Zinger provides developers an easy to handle backend for ordering & delivering foods, groceries, fruits, vegetables, medicines, etc. Zinger speeds up the development phase by Inventory Management, Order Tracking, Scheduled Tasks, Security, Auditing, Notifications etc...

Inventory Management: Track and manage availability of inventories with ease.

Order Tracking: Track orders from initial acceptance to last mile delivery to customers.

Scheduled Tasks: Schedule recurring background jobs and time them to meet your needs.



Security: Authenticate, confirm and manage users in a role based manner.

Auditing: Audit and generate reports to track and monitor the application.

Notifications: Receive real time alerts including push notifications, email and SMS.

What can you build with Zinger?

The world's most popular apps that could be rebuilt using Zinger are Dunzo, Swiggy, Uber Eats, Zomato, Myntra, Amazon, MedPlus+, Ajio, 1mg, Decathlon, bigbasket, flipkart etc....

Our Framework works with Every platform!!

Zinger can seamlessly integrate with various web & mobile applications like Angular, JavaScript, Kotlin, React, Java, Swift etc

An android application **Zinger Partner** is also under development using this framework. It is an internal food delivery platform developed to operate in college or company cafeteria internally in reducing the queue length in counters.



I was fortunate to be a part of this framework's development team and worked on the framework's initial phase of development, and I am looking forward to working on the framework's upcoming releases. I specially thank my seniors Logesh D (CSE), Harshvardhan P (CSE) and Shrikanth Ravi(IT) who were the chief programmers in planning and bringing Zinger to life.

I hope this framework reaches far and wide, and improves the speed of digitizing businesses, so that the bond between customers and shopkeepers stays intact even during lockdown.

SUPRAJA .V IT B III YEAR

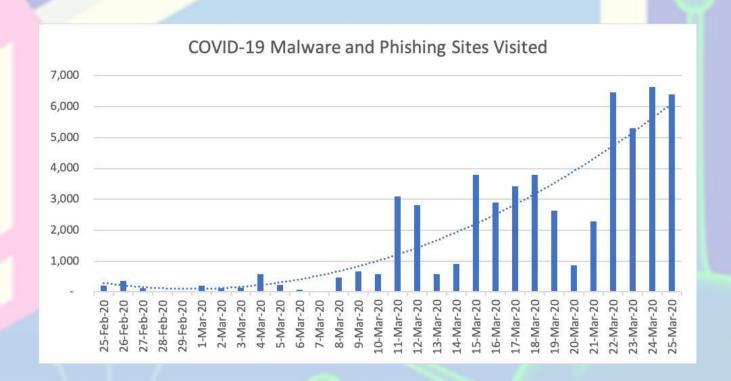


CYBER THREATS AMIDST COVID-19

The global coronavirus pandemic is twisting lifestyles and livelihoods all over the world. Day to day life has in itself taken a "U-Turn" forcing people to seek sanctuary over undefined periods of time. As people try their best to adapt and survive, the ever famous quote of naturalist and geologist, Charles Darwin - "Survival of the Fittest", casts its own shadow in the cyber world as malicious hackers invent new attack modules, taking advantage of the epidemic. How exactly? Amid the global outbreak, cybercriminals are increasingly using COVID-19 as a lure to trick unfocused users by capitalising on their fear and uncertainty.

Amongst the millions struggling to keep up with their lives, experiencing tough times to maintain their livelihoods and trying to maintain a balance between ends, there have seeded problems that are striving to worsen the condition.

The pandemic has created a cybercrime playground. From phishing scams to ransomware to social media attacks, COVID-19 focused malware campaigns are on the rise. In fact, according to research from Zscaler, there's been a 30,000 percent increase in coronavirus attacks. This is a dramatic spike cybersecurity activity. Cybercriminals have a long history of exploiting tragedies, natural disasters and other global and national crises, and we're seeing history repeat itself now. They're preying on people's emotions at a time when cybersecurity is taking a back seat to fear, uncertainty and panic. As a result, there is an unprecedented volume and variety of coronavirus-themed malware campaigns.



To start with, attackers are impersonating emails that appear to have been generated automatically by a legitimate file-sharing site such as OneDrive and take their victim to a phishing site through a legitimate file sharing site. Great way to steal credentials and scam people out of money!

Hackers have also attempted a spear-phishing attack on South Korean firms, hiding malware in documents purporting to contain information on Seoul's response to the pandemic.

Cybersecurity researchers have identified a new type of impersonation attack that is using Google file sharing and storage websites like Google Docs to trick victims into sharing login credentials. Of the nearly 100,000 form-based attacks detected between January 1 and April 30, Google Docs were used in 65 percent up 4 percent in India, making all attacks spear-phishing attacks in the first four months 2020. Kerala has recorded the highest number cyberattacks during the Covid-19 lockdown with the state seeing around 2,000 attacks during the period, highest in the country. Kerala was followed by Punjab with 207 attacks and Tamil Nadu, which saw 184 attacks, during the lockdown. These attacks are aimed to compromise computers and mobile devices to gain access to users confidential data, banking details, and cryptocurrency accounts.

Since the start of the COVID-19 pandemic, WHO has seen a dramatic increase in the number of cyber attacks directed at its staff, and email scams targeting the public at large. Some 450 active WHO email addresses and passwords were leaked online along with thousands belonging to others working on the novel coronavirus response.

As many know, Empire Market is one of the most popular places to buy illegal goods on the dark web. While recreational and common prescription drugs are a mainstay on dark web markets, there are a number medicinal drugs that have been touted prospective treatments for COVID-19. Druas hydroxychloroquine, remdesivir, favipiravir, lopinavir and ritionavir are on sale. The vendor claims to have an unlimited supply and will sell you a whopping 9,000 hydroxychloroquine pills for \$1,194. It is one of the few prominent markets that has not banned the sale of pandemic-related goods outright and is apparently happy to profit from the coronavirus.

There are numerous coronavirus-themed ransomware attacks being aimed at corporates every now and then, that employees are requested to practise distancing including in the cyber-space.

As humans are the weakest links to such attacks, it is the duty of every individual to stay not just strong during this situation, but also smart in order to avoid adverse effects.



- BUVANASRI .A.K IT A III YEAR



MEENAKSHI. R IT A III YEAR

CONTACT TRACING

I think all of us can agree when I say that we want the lockdown to end. Being stuck at home unable to go out and meet people or continue our "normal" life, has put us all in a state of limbo. But there is hope. And due to the rapid surge in technological advancements, it is unsurprising that the hope lies in the form of contact tracing apps.

What is contact tracing you may ask? Contact tracing has been used many times before to track and slow the spread of infectious diseases. The basic idea is that when a person finds out they've been infected, the contact everyone else they've been in contact with especially for prolonged periods of time. It's quite similar to detective work where you have to manually identify who has been in close contact with the infected person. This becomes a very tedious and erroneous process because it mainly relies on human memory. You may be able to list out your friends and family, but what about the people you don't even know. Say the passenger who sat next to you on the bus. Or the waitress who served you your food. It's impossible to trace every

person you've been in contact with through the traditional methods.





If only we had mobile tracking devices that could pinpoint your location. If only the devices could interact with other devices and store large amounts of data on cross referenceable databases.

With most of you reading this on your mobile, I think you get the gist. While contact tracing is a lot like detective work, letting technology be the detective is a game-changer.

So how does it work? All of our smartphones come equipped with Bluetooth technology. Bluetooth beacons are constantly pinging other devices with a unique ID for that particular device. If the long string



is not recognized, the devices are deleted from the memory.

But instead of deleting, what if the beacons store the signals. This would give us a comprehensible list of every device that has been in close contact with you in recent days.

Using the Bluetooth signals can also give us an idea of how close you were with someone and for how long. This is what apps like Aarogya Setu use, and what Apple and Google are working on.

How does the tracing part work? When a person gets tested positive, they can report that in the app. The persons name or location is not shared, but the people they have been in contact with will get notified about possible exposure.

This definitely is not fool proof. For one it assumes everyone has a smartphone on them at all time with the app activated. But there is no debate in that the new model will work better than the traditional ways of contact tracing.

Digital contact tracing and tracking may be key in visualising the spread of the virus and if implemented in a secure and safe way, maybe the solution to relaxing the lockdown and reinstate "normalcy".

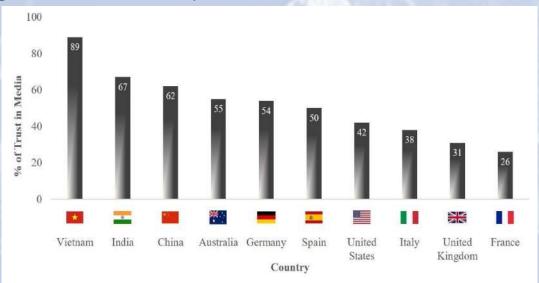
- SANJANA SUKUMAR IT B III YEAR



COVID -19 VS MANKIND

Pandemic is not a word to be used lightly or carelessly. COVID-19 is something viewed lightly without fear and now sparked out to be a serious disaster to mankind. Each and every nation is fighting against an invisible virus called CORONA with many challenges like lack of capacity, resources and resolving abilities.

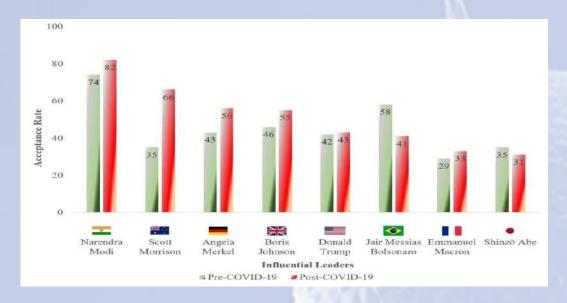
On the flow of virus spread, it is important to create awareness to public on what is happening around the world. The matter of spreading worthy information across people by a journalist has many influential building trust and credibility on factors like media, reducing pandemic national the immediate action misinformation assurina on digital media ecosystem.



How and where is trust on media during COVID-19

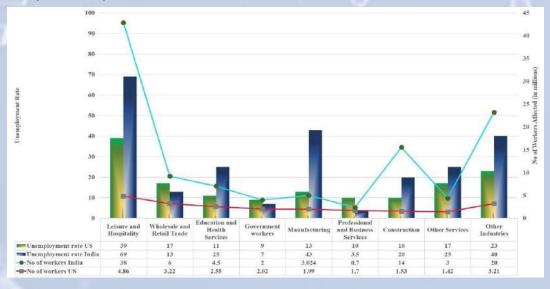
The critical need of the hour is how well the country is able to combat the pandemic effects and rise up. Therefore, the leaders who work during these pandemic days are most noted and influential to the citizens of a nation. Now that the development of social media has given higher scopes for identifying an efficient leader to leverage the existing resources and handle the crisis efficiently.

According to a research report, Narendra Modi stands on top of all other leaders in influencing people and abiding by his words.



How leaders influenced their countrymen Pre-COVID-19 and Post-COVID-19.

The worldwide lockdown had reflected desperately in the economic base of every citizen. The sudden lockdown in India also has similar effects and the citizens had to face job loss, economic crisis, investment and harvest slips in stock markets and personal or business commitments. Yet there is a new hope that at least 21 million people would be employed after the lockdown is lifted either partially or completely.



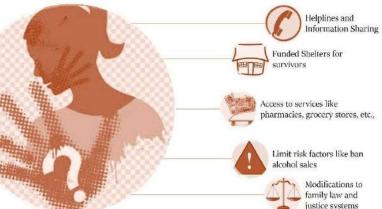
The rise of unemployment due to worldwide lockdown for COVID-19 for US and INDIA.

So there is a ray of hope which predicts an expected employment rate 30.9% thereby providing jobs to more than 100 million citizens, says Centre for Monitoring Indian Economy (CMIE).

The people stay indoors during lockdown and obviously women at home are loaded with household work irrespective of being employed.

The society is twinned with the cultural and social stigmas which result in domestic violence. The Director of Center for Social Research, Ranjana Kumari says, 'Violence get amplified during pandemic and crisis. It arises when there are unequal relationship, patriarchy and hierarchy in a family environment'. The United Nations has coined a new term called 'Shadow Pandemic' referring to the effects faced by women due to the

UNICEF recommends Governments to respond for violence against Women and Children



COVIDactual pandemic, The state of Uttar also Pradesh made that women are safe launching an initiative, 'Suppress corona, not your enablina voice' by helpline number to reach women police officers.

evolution of digital networks has enabled smart and easv communication between people. Yes, it is important to appreciate every digital initiative that world kick starts with during pandemic. But respect to India, it is still a fuzzy factor of being efficiently implemented and accessed by citizens. India has many schemes and initiatives with regard to Digital India.

Yet, is it really possible to

have a equalised digital service all around the nation?



Many educational activist, students and parents are very much concerned about the Distance Learning Method (DLM) for school students.

The main concern that arises when thinking of DLM is that the readiness, affordability and availability of digital resources by every student in India is not the same.

Why is COVID-19 still good to have?

The coronavirus pandemic has caused a global decline in economic activity and while this is a serious concern, it appears that the ramping down of human activity has had a positive environmental impact. Experts have reported that the Nitrogen Dioxide (NO_2) levels in air was reducing since lockdown, hopefully saving many human and nearly extinct species lives. Water bodies have also been clearing, and major changes have been seen in the Yamuna and Ganga rivers after a nationwide lockdown was imposed. According to the Central Pollution Control Board's (CPCB) real-time water monitoring results, the average water

quality of the Ganga 27 points seen in recent days is suitable for bathing and wildlife and fisheries propagation.

With the world being amused by globalization and modern lifestyle, it was hard to find time for having quality family time. This pandemic has improved scope for getting in touch with local vendors and business peers, family, friends and neighbours even in the metros of the country. No doubt that nature and wildlife is healing when people stay indoors.





- GEETHA R Junior Research Fellow, IT Department

CONTAINERS

Amidst this quarantine, locked up within the four walls, all of us would have pretty much consumed applications for various purposes and in fact been obligated towards their usages.

So, Do you know there was this whole clandestine operation running behind these "applications" you constantly make use of day-to-day? It is known as "CONTAINER TECHNOLOGY".

Even popular cloud computing services like Amazon web services, Microsoft Azure, Google cloud platform have embraced this technology with container software having names like kubernetes, Docker and so.

When you run an application that was written with thousands of lines of code, what makes you so sure that the data is transferred without any loss from the company's server and delivered to you and the other customers unbiased? Right there enters

into the frame our container technology, shortly called as "containers".

Containers are as solution to the problem of how to get software to run reliably when moved from one computing environment to another, to avoid

OS differences and such. They facilitate deployment of software to a server.

HOW DOES THE CONTAINER SOLVE THIS?

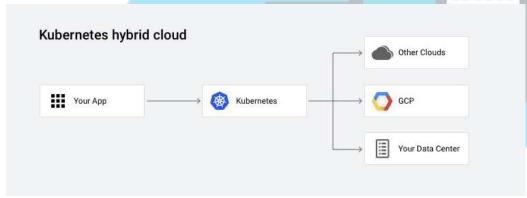
A container consists of an entire runtime environment: an application, plus all its dependencies, bundled into one package to avoid differences in the OS distribution.

They work together as a "container cluster". And this methodology is what is followed by Kubernetes container clusters.



The best known and most widely used free and open source container management systems is "Kubernetes", which is a software project that originated at Google. Kubernetes provides mechanisms for deploying, maintaining and scaling containerized applications.

While containers are able to run all types of software, older programs that were designed to run on a virtual machine do not migrate well to the container technology which can be put onto a cloud platform like "Microsoft Azure".

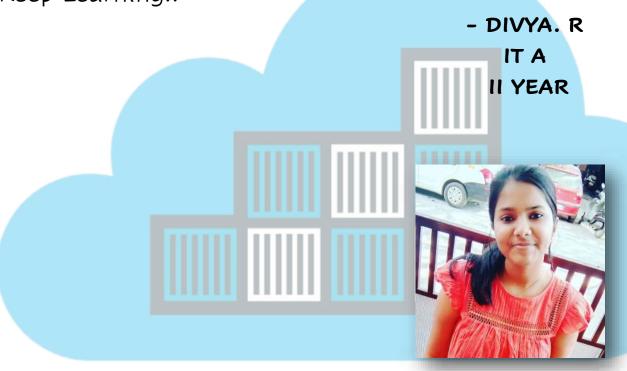


WHY EXACTLY CONTAINERS?

Before containers came into existence, virtual machines were on the run. In this case, one physical server was able to be used for multiple applications via virtual machines where each one contains an entire OS and applications to run. Hence, by running several OS simultaneously, there was a lot of overhead on the server. In contrast, with container technology, the server runs a single OS, as each container is able to share this single OS with the other containers on the server, and doesn't interfere with them.

And most importantly, containers consume significantly less amount of space compared to virtual machines. For example, while each virtual machine may require gigabytes of storage, each container running a similar program may only need megabytes. This technology was a huge success in the IT industry. To add on, this technology was found in 1979, but still seems new. But, better to know of it now than never.

Keep Learning!!





NON TECHNICAL ARTICLES



BOARD-OM HACKED

Call it a royal comeback or a break from Netflix and chill, board games have had their much needed revival in the most unexpected ways. Being locked for more than 70 days and struggling to find ways to spend time, majority of us have taken to removing dust from the good old board games and opening a box full of nostalgia.



This lockdown has taken a toll on most of us in different ways at different points in time but board games have proven to bring families, siblings and friends together. People are looking for more engaging social activities as they become more isolated by technology. The real beauty of board games is that they are crossgenerational so people of all age groups can come together and spend a few hours playing and chilling. Believe it or not hypermarket chain Big Bazaar sold over 20,000 units of Ludo and another 3,000 units of carrom boards when the government allowed sales of non-essential items.

Playing classics like Ludo, monopoly and carromis always refreshing as they are light-hearted and fun.

When one thinks of Ludo, one cannot really forget 'Ludo king' - the online game which put a lot of friendships at stake. Not to forget the several card games that either individuals or group of people can completely immerse themselves in.

Most of the board games have been converted into multiplayer applications, to connect family and friends from far and wide. Few of them are Uno!, Monopoly, Ludo King, etc.

So next time you're bored, why not try hacking BOARDom.

- PRIYANKA ATUL SRIVASTAVA IT B III YEAR



WHAT IF, THE BAT WAS NEVER EATEN?

2020... Let's put it this way, I would rather travel up and down to SSN for the rest of my life than to witness an abysmal year like it. People forced to sit in their houses, schools, malls, colleges, theatres and parks, all forced to shut down. The spectacle of the year, TOKYO 2020 got postponed and it goes without even saying that every other sporting event was brought to an indefinite halt. I feel that the most affected cult of fans were the football fans, boy don't we miss those weekend games , sitting in front of the tele, sipping on a chilled tin of coke along with a slice of 'za, hearing Peter Drury sing to us the ongoing affair and to top it all, watching Kevin De Bruyne flick the ball first time with his wand-like right foot, splitting apart the sternest of defences to create a mere tap-in for the King Kun Aguero. Have you wondered what would have happened had corona never existed, more specifically what could have been the footballing timeline like had this epidemic never took off !? Let's take a look at few of the most probable events that could have taken place.

1) A REDICULOUS TITLE WIN

LIVERPOOL FC finally make it to the summit by winning their first Premier league trophy ever and the first league trophy in almost 30 years. The Reds were 25 points clear off the second placed Man City and needed just 2 wins to be crowned as the English champions ,which predictably they did.



Their very first visit as champions was to the Etihad Stadium where Man City gave them the guard of honour. Liverpool finally got their Hollywood ending to their aeons long wait for the trophy. Back to the reality, looks like even the gods do not want to see Liverpool lifting the PL trophy but hang on reds for a tad bit longer, the football is gonna resume and there is absolutely no one who can take away that picture perfect finish from you. PL trophy but hang on reds for a tad bit longer, the football is gonna resume and there is absolutely no one who can take away that picture perfect finish from you.

2) CIRO DELL'ITALIA

Ciro Immobile, wins the race for Serie A golden boot, by beating Cristiano Ronaldo by a long distance. This is not the only feat of Ciro's campaign this year, he has also become the first player to score 40+ goals in a single Serie A season and last but not the least, he has broken Gonzalo



Higuain's most goals (36 goals) by an individual in a Serie A season set in the 2015/16 campaign. He has been the most important cog in Lazio's attack this season and has the numbers to second it. He is inherently a right footed striker, with an incredible knack for finishing and has been equally good with his weak foot and head taking into consideration that he is certainly not the tallest on the pitch.

3) THE ENGLISH DOMINANCE CONTINUES...

Jurgen Klopp's Liverpool lifted the Champions League trophy last year, making it his first trophy at the club. Man city got knocked out of the quarter finals for the past two years and were still on their search for the Europe's most coveted trophy in club football. Well, their wait has finally come to an end as the blue moon rises high by beating Bayern Munich in an exhilarating final. Kevin De Bruyne played the best match of his career so far, assisting 3 goals and

scoring another. He went on to be crowned the man of the match and with such a stellar performance, and it is safe to say that he is now within a touching distance for the Ballandor. For two years in a row now an English team has won the champions league which goes on to show the increase in quality of football in the Premier League. England now has four different teams to have lifted this coveted UCL trophy, one more than any other country. England now also has six different teams to play in a UCL final, two more than any other country.



- RONAK AGARWAL IT B III YEAR



PENSIVE LOCKDOWN

Well...what about the time
You yearned for the free time?!
When you wished that
The world was free from all the pollution..
When you longed for peace and silence
Amidst the world's violence ..
Going through an head torment
All that you simply wanted is
That horn blares to stop for a moment..
Isn't this what you want?
A "Quality Time" for yourselves

Well..what about the time
When you were desperate
For five more minutes of sleep
As you dragged yourself sighing
To yet another tiring day's heap
And then comes the time
As you convince yourself all day
You deserved a much needed break
Facing gasp inducing workload everyday...

Well..well..pardon me ..
As obnoxious it may sound
But isn't it the same you
Who is right now hopping in front of the news
Hoping to be let free
Running to the balcony
Every time you hear the horn

Who craves for a morning walk in the beach
Who to your own amusement
Actually want to get this over with
And meet your dumb friends
And actually be much more delighted
To watch the children running on the road
With the balloon in their hands
And the kids squealing with delight
As they gather as a group for a game

Well..well..

As the saying goes,

"To want the rainbow

You've got to bear the rain..!! "

Let's get this over with soon together

And for now go with the flow

- DIVYA.R IT A II YEAR

EXPRESS GOODWILL

Dig ,dig up the coal,

Take it home to light your stove.

Can you see the sunlight

Glowing after million years?

Once it was a fern or reed,
Out it came to the sun to feed.
Greens caught, carried and transfigured
The light they could, to energy.

Soon the earth took up the peat, The plant died and decayed into. Now the coal is a sparkling stone, Out of the womb after eons.

Can you believe, the million years old light
Heating your home tonight?
For him, your life is a two fingers snap.
Wide awake and do good deeds.
See with your eyes before they close forever.

- SAMEERA HOLY S
IT B
III YEAR



BEAUTIFUL

Harry's snow white Hedwig,
enchanting every on-looking eye.
While li'l Pigwidgeon, brown, briskly twitters by!
Yet, in their own queer stances,
aren't they both beautiful?

The summer shores beckon the jolly Malibu.

While the chilly fall, the hot, hot barbecue!

Yet, most deliciously, aren't they both beautiful?

There's the spice of tangy pizzas
at the buddies' party.
While there's porridge so plain,
with granny's paparazzi!
Yet, perfectly in situ, aren't they both beautiful?

Spreading warm radiant beams, the Sun takes the throne.
While the glistening white moon hasn't any of its own!

Yet, mesmerizingly, aren't they both beautiful?
The strong man strides, as swift as a gazelle.
While his affectionate iron pillar, his dainty damsel!
Yet, delightfully coupled, aren't they both beautiful?

Oh! How beautiful is Love,
sans hate, sans cold shoulder!
In the beautiful eyes and pious heart
of the blessed beholder!
Manifestly, life's Pleasures and Pains,
aren't they both beautiful?



- JANANIE. R. BALAJI IT A IV YEAR

பள்ளிக்கூடம்

தலையின் மீது கை வைத்து காதை எட்டிப் பிடித்து பள்ளியில் சேர்ந்த பொற்காலத்தை நினைத்து ஏங்கும் இளைஞர்களே!!! பள்ளியில் சேர்ந்த பின்பு மாலை மணி அடிக்கும் வரை காத்திருந்த அந்தக் காத்திருப்பு கனநேரம் கூட சுகமானது!!! பள்ளியில் நண்பனின் உணவை அனைவரும் <mark>பகிர்ந்து உண்டு பங்காளியாக</mark> ஊரெங்கும் சுற்றிய இ<mark>னியக் கா</mark>ல<mark>ம் அது!!!!</mark> அனைவரும் சீ<mark>ருடையில் சென்று பாகுபாடு</mark> ஏதுமில்லாமல் <mark>பகுத்தறிவோடு</mark> ச<mark>மச்சீர</mark>் தன்மையும் ஒன்று<mark>படக் கற்றுத் திகழ்ந்தோ</mark>ம்!! ஒரு ரூபாயை வைத்துக் கிழவிக் க<mark>டையில</mark>் மிட்டாய் வாங்கித் தின்றும், திருட்டுத் தனமாக மாங்காய் அடித்தக் காலம் அது!!! பள்ளியின் ஆண்டு வி<mark>ழாவில் பல நட</mark>னப<mark>்</mark> போட்டிகளில் கலந்துக் கொண்டு பரிசுகளைத் தட்டிச் சென்றப் பொற்<mark>கா</mark>லம் <u>!!!!</u> பள்ளிக் காலங்கள் முடிந்த<mark>ு கல்லூரியில</mark>் சேர்ந்த போது பள்ளிக்கால நினைவுகள<mark>ை</mark> எண்ணி ஏங்குகின்<mark>ற இளைஞனின் கதற</mark>ல் இது!!!



-வீர்மணி முருகேசன் IT B III YEAR



Bag of marbles

You have three bags, each containing two marbles. Bag A contains two white marbles, Bag B contains two black marbles, and Bag C contains one white marble and one black marble. You pick a random bag and take out one marble. It is a white marble.

What is the probability that the remaining marble from the same bag is also white?

Boy and girl

A boy and a girl are talking.

"I am a boy" said the child with black hair.

"I am a girl" said the child with white hair.

At least one of them lied. Who is the boy and who is the girl?

• Coffee or soda

George, Helen, and Steve are drinking coffee. Bert, Karen, and Dave are drinking soda. Using logic, is Elizabeth drinking coffee or soda?

Nail on tree

When John was six years old he hammered a nail into his favourite tree to mark his height. Ten years later at age sixteen, John returned to see how much higher the nail was. If the tree grew by five centimetres each year, how much higher would the nail be?

What is unique about 8549176320?

		7
13	37	

 Every row, column and diagonal should add up to 111. But there are some numbers missing!

Fill in the missing numbers. They are all different.

Consecutive numbers

A Teacher thinks of two consecutive (one after the other) numbers in the range 1 to 10, and tells Alex one of the numbers and Sam the other.

Sam and Alex have the following conversation:

Alex: I don't know your number.

Sam: I don't know your number, either.

Alex: Now I know!

Can you find all 4 solutions?

ART CORNER Doodle: R. Geetha, RS



SUPRAJA. V IT B III YEAR





SUPRIYA. S IT B III YEAR









THANMAYEE. A IT A I YEAR





ELAKKIYA. P IT A II YEAR

NO ENTRY





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SHIVA. R IT B III YEAR









PUZZLE SOLUTIONS

Bag of marbles

2/3 (not 1/2)

You know that you do not have Bag B (two black marbles) so there are three possibilities:

You chose Bag A, first white marble. The other marble will be white.

You chose Bag A, second white marble. The other marble will be white.

You chose Bag C, the white marble. The other marble will be black.

So 2 out of 3 possibilities are white.

Boy and girl

They both lied.

The child with the black hair is the girl, and the child with the white hair is the boy.

(If only one lied they would both be boys or both be girls)

Coffee or soda

Elizabeth is drinking coffee. The letter E appears twice in her name, as it does in the names of the others that are drinking coffee.

Nail on tree

Same height as trees go at the top.

What is unique about 8549176320?

It is the digits 0 to 9 in alphabetical order.

Fill in the missing numbers.

/	31	73	7
	13	37	61
	67	1	43

Consecutive numbers

If Sam or Alex had 1 or 10, then they would have solved it straight away. But neither did.

But when Alex discovered that Sam didn't know, he went from not knowing to knowing. So Alex must have had a number where Sam's answer was crucial.

If Alex had 2, then Sam could have 1 or 3 - and the crucial answer "I don't know your number, either" would have ruled out 1, leaving 3 as the other number (Solution: 2 and 3)

Now, if Alex had 3, then he would expect Sam to have either 2 or 4. But if Sam had 2, Sam could have guessed the answer already (because Alex had already said he didn't know, so could not have had 1). When Alex discovers that Sam also doesn't know, he can rule out 2 as the answer. (Solution: 3 and 4).

Exactly the same arguments work at the other end of the range, providing the other two solutions: (Solution: 9 and 8) and (Solution: 8 and 7)

EDITOR'S NOTE

At this juncture, we would like to express our sincere, heartfelt gratitude to the management, students and faculty for their valuable contributions, constant encouragement and support.

Wishing an engaging reading!

Regards, Editorial team, IdentITy

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