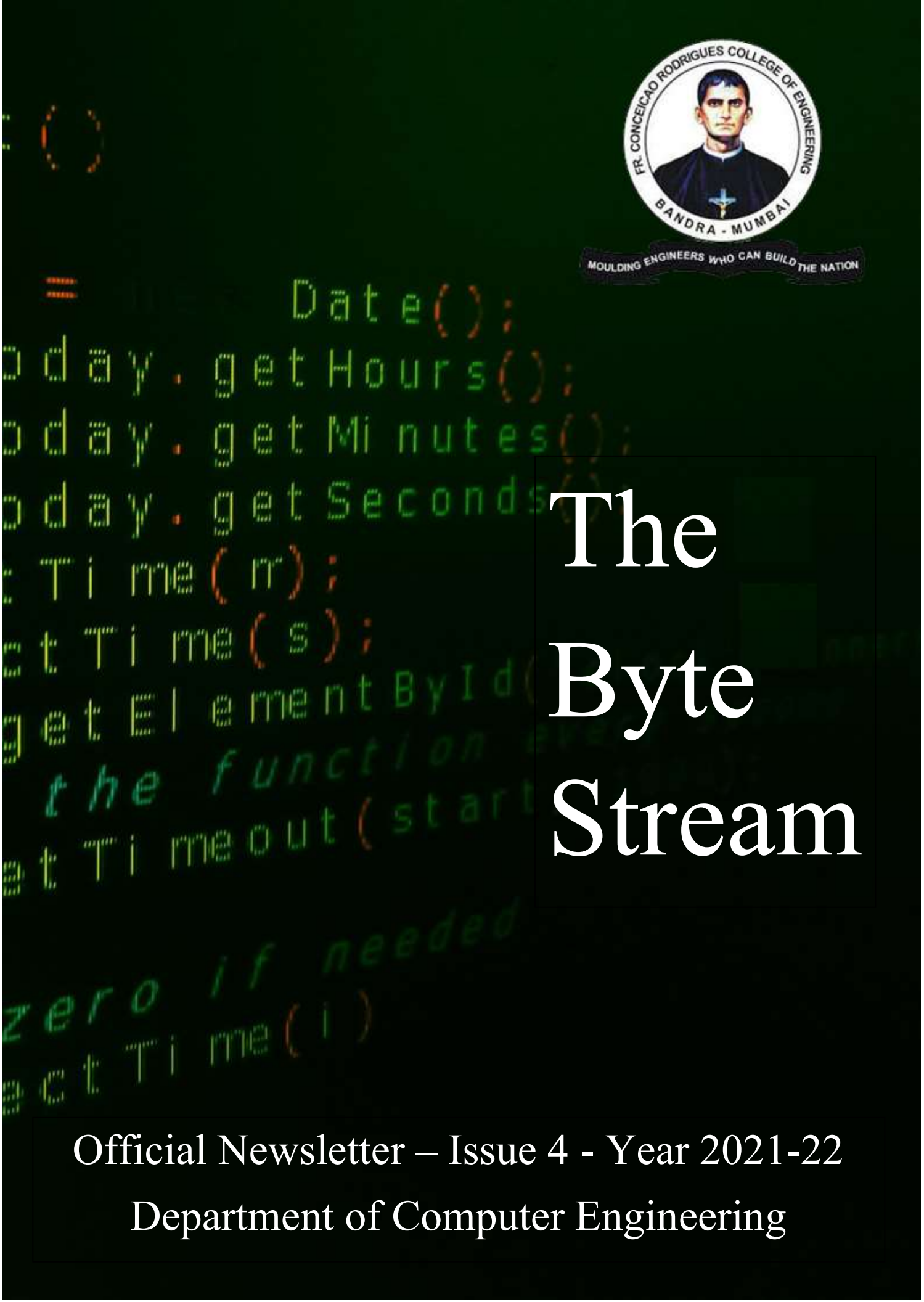


The Byte Stream

Official Newsletter – Issue 4 - Year 2021-22

Department of Computer Engineering

In the Issue

Department of **Computer Engineering** was established in 1991. The department offers B.E. in Computer Engineering, a four-year degree program with an intake of **120** students. It has excellent infrastructure and highly qualified and professionally skilled faculty. The department conducts various training programs to help faculty and students to improve their technical knowledge. It has signed MoU with several companies like Tata Consultancy Services, IBM and D-Link. Graduates of our department have been recruited by major IT companies such as TCS, Accenture, Morgan Stanley, JP Morgan Chase, ZS, Seclure, SAP, Amdocs to name a few.

Vision, Mission, PEO and PSO

Vision

To grow as a center of excellence and prepare high quality engineering graduates capable of excelling in their chosen field of an enterprise through an innovative and rigorous approach to education.

Mission

- To blend theoretical knowledge with practical applications by imparting high standard technical education.
- To provide the techno-managerial skills for achieving excellence in their respective area of specialization.
- To encourage faculty involvement in pursuing academic excellence through quality research and publications.

Program Educational Objectives

At the completion of the program, graduates will have the ability to

- Analyze, formulate and provide solutions for real world problems with social ethics using fundamental scientific, mathematical and computing knowledge.
- Adapt to the ever-changing technologies in computer science and apply them in multidisciplinary scenarios.
- Develop and demonstrate leadership and interpersonal skills to work individually and as part of a team.

Program Specific Outcomes

PSO1 Apply fundamental computer science knowledge to solve real world problems.

PSO2 Design and Implement software systems of varying complexity in multidisciplinary scenarios that meet specified requirements with appropriate consideration to architectural, algorithmic and security aspects.

Message from HOD's Desk

Dear Students,

I hope you all are keeping well.

'The Byte Stream' is directed to students, alumni, and faculty members of Computer Dept. The intent is to provide the readers with up-to-date information regarding current academic ,research activities, technical capabilities and other services provided by the Department. The Newsletter provides a dynamic account of events and summarizes the recent staff and student accomplishment.

I am pleased to inform you that college have secured 47th rank in top Engineering Institute in the Country & is among top 5 Engineering Colleges in Mumbai. In order to keep pace, the department is also maintaining a good placement & Internship record over years.

Owing to the impact of COVID 19, there was a massive transformation happened across the world in teaching through the virtual mode. It's heartening to mention that the department has taken breakthrough initiatives in scheduling various webinars & assorted online teaching which served as vital platforms to acquaint the students. With changeover times, the shit from online to offline was stressful for the most part but I am eternally grateful to the college and the department to carry on our work regardless.

I, take this opportunity to thank all the stakeholders for showing interest and continuous support. I extend my best wishes to all students in their chosen career path and I am sure the department will scale up to greater heights in the years to come and serve many more in the society.

Dr. B. S. Daga (HOD)

Dept. of Computer Engineering

Message from Editor's Desk

Believing in yourself is the first secret of success.
Work with Integrity, Purity and Truthfulness.
Focus on being the best version of yourself.
Persevere with strength and faith.

The word impossible itself says "I' m Possible"!

NEVER GIVE UP.

Dear Readers,

Prof. Swati Ringe here!

Warm Greetings!!!

It gives me immense pleasure in bringing out the fourth issue of the newsletter "The Byte Stream 2021-22" of the Department of Computer Engineering, Fr. Conceicao Rodrigues College Of Engineering.

Our eyes are the windows of the soul and portray couple of emotions such as happiness coupled with inner peace reflecting calm and peaceful mind. Similarly this newsletter is the reflection of sparkling enthusiasm and dedication of teachers for the profession that they have chosen and brilliance of students. Also it is a perfect platform to highlight department activities, achievements of students and faculty.

I thank all the Students, Faculty, and Alumni for their support and contribution in preparing the contents of this newsletter. I extend my thanks to college Management, Principal Dr. Srija Unnikrishnan and Head of the Department Dr. B.S. Daga for giving me an opportunity.

If you have any questions, comments, concerns, or constructive suggestions, we'd love to hear them, so please e-mail! swati@fragnel.edu.in

My Best wishes to all the readers!
Happy Reading!

Alumni Corner

What to make of your degree?

Sumedh G M Deshpande
Senior Analyst, Strategic Planning & Business Development
InfiCorridor Solutions Pvt Ltd

We've all heard the stereotypical comments about engineering and how, in the end, it doesn't really amount to much for the majority of us. Well, I'm here to change your mind about that notion. When you enroll in the course, you may do so for a variety of reasons, ranging from a natural interest in the field to the fact that you didn't really think it through and this was the safest bet. Before you embark on your journey, you must understand that it is much more than those jokes or comments; it is a way of life.

An analytical approach is one of the most important things that you'll learn regardless of whether you choose to actively understand the curriculum. This will assist you in making logical decisions in both your professional and personal lives. This approach to problem solving will become ingrained in you over the course of the degree.
So the question now is, how do you make the most of it while pursuing it?
In a nutshell, do everything and anything that comes to mind.

When I was in your shoes, I was active in Dramatics CRCE, Literary Club, Mavericks UAS, and participated in a few volleyball matches. Don't get me wrong, I would study as well, but I was primarily involved in these activities because I felt drawn to them. Whether it was technical work with Mavericks' robotics projects or regional competitions for Dramatics, there was so much to learn and discover about myself as an individual. One of the best aspects of our college is the encouragement and freedom to explore areas beyond the confines of the staple curriculum. As long as you can prove that you can strike a balance between your interests and academics, you will be given the liberty to explore those avenues.
Take my advice: now is the time to **discover your passions**. These aren't just things you'd do to pass the time; they add a lot of value to your CV, professional career, and personal life. You'd pick up a lot of skills along the way and figure out where your interests lie. Once you leave college, you won't have as much freedom or time to pursue these interests. You'd probably start with your job, master's degree, start-up or whatever else comes to mind. This time you devote to discovering yourself will take you a thousand miles ahead in the journey of life.

Begin small. Go ahead and try things just because you might be interested in them. Maintain a straightforward approach. Either you are certain that this is something you are interested in, you are certain that you are not interested in it, or you simply do not know. In both cases of knowing for certain that you don't like something and being unsure of where you stand, I'd recommend going at least once to see what opportunities await you. This can be for any events offered at college or elsewhere, ranging from Rotaract to Hackathons and everything in between. Once you've gained that experience, you'll be able to properly gauge what works for you and what doesn't. That is the most important thing. Identifying aspects of yourself that you want to build upon. Take on unexpected projects, own your work, and reach out to mentors. As a result, you'll be able to see where you're lacking and what skills you'll need to develop over time. It is critical to create a network of people who inspire you to do better.

Once you actively invest time in exploring these roads, you'll have much more clarity about what you want to do in the future. Just remember that now is the time to gear up and work around the clock to make the most and beyond of what your degree and college has to offer.

Alumni Corner

Nehal Kalnad,
Senior Software Engineer
Cimpress

I graduated from Fr. CRCE 2020 Computer Engineering Batch. The four years which I spent in college have helped me shape my career greatly. Hence, I would like to share some tips which I feel can help you grow as well. Though I'm not a good writer, I will try my best..

Don't leave any opportunity

In your engineering life, especially in our college, you will get many opportunities to showcase your talents, hone your skills and find out more about yourself. These opportunities need not be restricted only to your domain. You can take up management roles in Councils and Clubs, or you can excel in your communications skills by being the host of events happening in college. Culture Fest and Technical Fests are the best time to show your teamwork. Don't use studies as an excuse to run away from extracurricular activities. Trust me, every small thing you learn here is going to be useful in future.

Get Out and Explore

Don't restrict yourself to activities just within our college. There are many inter-college events and competitions, make sure you participate in them and visit other colleges. This is the best way to raise your bar and understand where you stand in the current market. Because after you graduate, the competition is with the open world. You also increase your networking when you visit other colleges. Connecting with the right people will help you get lots of beneficial opportunities.

Don't Take Projects Lightly

I have seen many students who take college projects very lightly. Some just google and submit readymade projects, or some just do the bare minimum before the deadline. This is the biggest mistake that students realize only when they reach their placements. They don't have any good projects to talk about in the interview, and even if they have, they are not able to talk because it was not made by them. College projects are the best time to explore new technologies and innovate. Whenever you are working on projects, question yourself "Can I proudly and confidently talk about it in my interviews?"

Practical Knowledge along with Grades

I have seen many people getting so stressed about pointers, especially in their 1st and 2nd Years. Don't get let your low scores and others' high scores get into your head. Because your Resume doesn't contain just your grades. Internships play a vital role. If you have good experience in your domain, no one will ask you why your grades are low. So just find your strength and work on it.

Believing yourself is the first step to success, next is curiosity. Keep learning and exploring, a great journey awaits.

Alumni Corner – Project work

Investigating a Neuro-evolutionary Approach to Text Classification

Kevyln Kadamala
Pursuing MSc in Artificial Intelligence at National University of Ireland, Galway

For my Master's thesis, I am investigating a neuro-evolutionary approach to text classification. An approach that isn't usually used in natural language processing, but has found success in domains like reinforcement learning and computer vision. Below, I give a brief introduction to the problems that we are trying to solve and the methods we propose to solve them with.

An Introduction to the Problem

Over the past decade, natural language processing (NLP) systems have shifted from rule-based techniques to machine learning-based algorithms. This has led to the development of different architectures and models for different tasks. Some of these models like the Transformers [1], convolution neural networks (CNN) [2] and recurrent neural networks (RNN) [3] have now become ubiquitous in NLP.

They have been used for different tasks like natural language generation, natural language understanding, named-entity recognition, parts-of-speech tagging and text classification. In our work, we are working with different text classification tasks. Here, the aim is to categorise text into pre-defined groups or categories. Usually, researchers carefully design neural network architectures for each task. However, evolutionary strategies like neural architecture search try to skip this step by searching for optimal architectures for a given task. But, little work has been done to apply such techniques to text classification tasks. Hence, we propose to ask the question - Can evolutionary strategies search for optimal network architectures across different NLP classification tasks?

What is NLP?

NLP involves processing written and spoken natural language with the help of computational techniques. Using NLP, text data can be analysed and processed to generate more data, help with decision-making, or derive new knowledge. Its typical applications include classification, translation, language generation and knowledge extraction. Our work mainly focuses on text classification, which involves classifying or categorising texts into pre-defined classes or categories.

How are such AI systems built?

Such text classification systems consist of ANN architectures usually designed over an iterated research process. As a result, ANN architectures like the RNN [3], the CNN [2] and, until more recently, the Transformer [1] have become common in NLP applications. Transformer architectures are usually pre-trained on large text corpora and then fine-tuned for specific applications. Fine-tuning involves using a model that has already been trained on a particular task and then further training it on more domain-specific data for another task. Transformer architectures like BERT [4] usually form the base model of such NLP applications providing useful vector embeddings from a given text.

Alumni Corner – Project work

The Possible Solution?

We could automate the classification layer's design that uses these vector embeddings with the help of Evolutionary Computing (EC) and Neural Architecture Search (NAS). Thus, possibly resulting in a novel architecture that outperforms human designed ANNs. The NEAT algorithm [5], is one such NAS technique wherein ANNs are created using EC. With the help of a fitness function that adequately captures the representation of all classes, an ANN could be evolved to help in solving the unbalanced data problem.

Planned Solution

Thus, in our work, we aim to first compare the performance between a simple handcrafted ANN and a ANN generated by the NEAT algorithm. This would give us an estimation of how well the different algorithms would fit onto the toy datasets. We then scale these algorithms to perform an analytical comparison on larger and more complex datasets, namely, the Reuters-21578 Corpus (https://kdd.ics.uci.edu/databases/reuters21578/reuters21578.html) and the 20 Newsgroup dataset (http://qwone.com/~jason/20Newsgroups/) for multi-label and multi-class text classification respectively.

Conclusion

NAS has often been used with reinforcement learning or computer vision. However, there has been limited work done to use such techniques for NLP problems. With our research question, we are aiming to show the viability of evolving neural networks for the fine-tuning of models for text classification problems.

References

[1] A. Vaswani, N. M. Shazeer, N. Parmar, J. Uszkoreit, L. Jones, A. N. Gomez, L. Kaiser, and I. Polosukhin, "Attention is All you Need," ArXiv, vol. abs/1706.03762, 2017.

[2] Y. LeCun, B. Boser, J. S. Denker, D. Henderson, R. E. Howard, W. Hubbard, and L. D. Jackel, "Backpropagation applied to handwritten zip code recognition," Neural computation, vol. 1, no. 4, pp. 541–551, 1989.

[3] S. Hochreiter and J. Schmidhuber, "Long short-term memory," Neural computation, vol. 9, no. 8, pp. 1735–1780, 1997.

[4] J. Devlin, M.-W. Chang, K. Lee, and K. Toutanova, Bert: Pre-training of deep bidirectional transformers for language understanding, 2018. doi: 10.48550/ARXIV.1810.04805. [Online]. Available: https://arxiv.org/abs/1810.04805.

[5] K. O. Stanley and R. Miikkulainen, "Evolving neural networks through augmenting topologies," Evolutionary computation, vol. 10, no. 2, pp. 99–127, 2002.

Class Pictures

BE Computers

TE Computers – A

TE Computers - B

SE Computers -A

SE Computers - B

Student Achievements

Sr. No	Paper contests, Design contests, Any other awards, achievements
1	Final year students **Dias Mario, Nicola Mascarenhas, Yash Khasgiwala** won Consolation Prize at AI for Healthcare Hackathon, an initiative of SINE-IITB, supported by MSH, MEITY, and organized by DERBI Foundation virtually in the month of Aug 2021 for the Theme: Deep Learning Multiple Diseases Prediction Model based on Retina Image. Part of Team: Medical Explorers.
2	Third year students **Prachi Mohare, Arnav Chawate, Jayesh Badwal, and Brendan Lucas** - Winner of e-Yantra Innovation Challenge 2022 under the Best Hardware category for the project "coconut harvester"
3	Third year students **Ishaan Loomba, Rissa Chettiar, Mann Sanghvi, Praveen Bhandari, Rachel Sequeira, and Sumit Kothari -** Team Velocity 7, Winner of TIAA Hackathon, TIAA, April'22.
4	Third year students **Sania Tuscano , Vibhav Bollavarthi, Colin Dsouza, Jesica Dsouza, Sakshi Shetty, Akhilesh More** – Team Infura was declared the first runner-up of TIAA Hackathon, TIAA, April'22.
5	Third year Students **Rohan Tapulli, Bhuvanesh kolhe, Jainesh Chawan, Abde-abitalib , Rachel Dhalwani, Aaron Dsouza- T**eam Mavericks, UAS second runner up, TIAA Hackathon, TIAA, April'22.
6	Third year student **Mahamuni Aditya Rajendra** Successfully completed Level 1 and Level 2 of Learn to Earn Cloud Security Challenge by Google Cloud and Qwiklabs
7	Third year student **Jain Lavish Kumar** Problem Solving Certificate by HackerRank.
8	Third year student **Almeida Alan Anthony** secured 1st Position at SynTechXist Quiz, National College Bandra, 04/03/22.
9	Third year student **Almeida Alan Anthony** secured second prize at Debug Me, National College Bandra.
10	Third year student **Patrick Ronald Basil** secured second prize in **Algoholic 1.0** - Sept 2021
11	Third year student **Loomba Ishaan Sanjeev** Crescendo Hackathon, FRCRCE, March'22 Winner
12	Third year Student **George Anna Benoy** participated in Flipkart GRiD 3.0: D2C Robotics Challenge and in Brain Wreck, national level technical event "Equilibrium 2021"
13	Third year Student **George Anna Benoy** winner in sports event Intra College Tug-of-war Girls
14	Third year student **Mahamuni Aditya Rajendra** Represented Mumbai City in Men's U/23 800m event in the Maharashtra Athletics Association State level championship (August 2021). Participated in and represented our college in an inter college Basketball tournament held at KJ Somaiya, Vidyavihar (April 2022).
15	Third year student **Mishra Kaustubh Krishnanand** participated in "GALATIC PROBLEM-SOLVER - Nasa Space Apps Challenge 2021" held on 2 nd and 3 rd October 2021with outstanding performance and effort to address challenges in largest global annual hackathon on Earth.

Student Achievements

Sr. No	Paper contests, Design contests, Any other awards, achievements
16	Third year student **Dsouza Colin**, Athlead Table tennis doubles runner up and winner of Crescendo PS 2 competition during Crescendo organized by CRCE, March 2022.
17	Third year student **Mishra Kaustubh Krishnanand** secured third place in coding competition Algoholic 1.0 organized by CodeLabs CRCE on 19th September 2021.
18	Third year student **Mahamuni Aditya Rajendra** successfully completed Level 1 and Level 2 of Learn to Earn Cloud Security Challenge by Google Cloud and Qwiklabs.
19	Third year student **Dsouza Colin, Brycen Fernandes won** Mindclash debate in second place hosted by SFIT, Mumbai
20	Third year student **Gadadare Aman Mansing**, Designathon by Bluelearn (UI/Ux hackathon)
21	Third year student **More Akhilesh Sambhaji** won the First prize in Crescendo Hackathon 2022 organized by CRCE March 2022.
22	Second year student **Fernandes Eric** , cleared 2 rounds of Flipkart grid 3.0 competition, 2 rounds of DD Robocon competition, Second place in crescendo hackathon, second place in unskript rookies hackathon
23	Second year student **Makwana Harshang** , secured first place in coding competition Alcoholic 1.0 organized by CodeLabs FrCRCE
24	Second year student **Pakhle Bhushan** secured 1st Runner Up in Crescendo Hackathon(PS: 3)
25	Second year student **Patankar Vedant** secured 1st Runner Up in Crescendo Hackathon(PS: 3)
26	Second year student **Patil Manasvi** Runner up Crescendo Mechathon, Fr CRCE Bandra
27	Second year student **Patra Srijita** secured 2nd position in Crescendo Hackathon(PS:2)
28	Second year student **Pimenta Shaun** , Winners of Crescendo Hackathon and Secured 5th Place in the SAE International West Competitions as a part of Team Vaayushastra
29	Second year student **Sharma Hitesh** , 2 nd runner up in Mumbai Hackathon, Finalist In Unscript Hackathon
30	Second year student **Tank Charmi,** secured first place in Hackathon 1: Crescendo, : 5th position in SAE Aero design Competition (Team Vaayushastra)
31	Second year student **Valiaparambil Ryan,** 1st Runner Up Hackathon 1:- UNSCRIPT ROOKIES [AIML], 1st Runner Up Hackathon 2:- CRESCENDO
32	Second year student **Vyas Aditya** winner of Hackathon 1:- Crescendo Elexathon
33	Second year student **Gracias Deon**, winner Hackathon 1:- Crescendo Elexathon, winner Hackathon 2:- Crescendo Mechathon
34	Second year student **Pawar Atharva** winner Hackathon 1:- Crescendo Elexathon, winner Hackathon 2:- Crescendo Mechathon
35	Second year student **Prajapati Vijay**, first runner up hackathon 1 :- techstrom, ruia college Dadar , winners hackathon 2 :- unscript, Fr. CRCE Bandra , winners hackathon 3 :- hackverse, nit Karnataka
36	Second year student **DSilva Chris** secured 4th place Unscript Rookies Hackathon

Student Achievements

Sr. No	Paper contests, Design contests, Any other awards, achievements
37	Second year student **Kallivalappil Neave** secured 2nd Place Unscript Rookies 2022 | 2nd place Crescendo Hackathon
38	Second year student **Mendonca Glenn** secured 2nd place Algoholic 1.0 | CodeLabs
39	Second year student **Misquitta Nigel** secured 4th place Unscript Rookies Hackathon
40	Second year student **Ojha Shubham** secured 3rd place Algoholic, Crescendo Hackathon 3rd place, DamnCon CTF, Shaastra CTF, Square CTF, Knight CTF
41	Second year student **Oza Riddhi** secured 3rd place Crescendo Hackathon
42	Second year student **Hudah Ansari** awarded for receiving special mention at the US House Representatives at **Verba Bellum 2021**
43	Second year student **Lewis Wesley Jude Joseph** secured 2nd place in Crescendo Hackathon(PS: 3)
44	Second year student **Gonsalves Dillon George** secured 2nd Place ATHLEAD Intra Badminton
45	Second year student **Kotian Unnati Ramesh** is Volunteering, Jankalyan Multipurpose Education Society, 22nd-29th Aug 2021
46	Second year student **Lopes Asher John** Completed Python Bootcamp From Zero to Hero in Python and participated in athlead intra badminton competition.
47	Third-year students **Venessa, Yashaswini, Dilton, Shruti** winners of the Dolat Capital - Code Fiesta Hackathon 2022
48	Third-year students **Lizel, Gini, Rincy** Runner-ups of the Dolat Capital - Code Fiesta Hackathon 2022

Events Organized Councils- IIC – FrCRCE

Prof. Kranti wagle, Prof. Ashwini Pansare, Prof. Swati Ringe

Ministry of Education (MoE), established Innovation Cell (MIC) to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes.

IIC-FrCRCE is linked with MIC and is established to promote innovation and startup culture in the Institution

IIC-FrCRCE 3.0 received 4 stars rating in the academic year 2020-2021

IIC ID IC201811040

Fr Conceicao Rodrigues College of Engineering (C-33981)

Star Ratings: IIC 3.0

IIC Annual Performance Report 2021-22 | IIC Annual Performance Report 2020-21 | IIC Annual Performance Report 2019-20

Performance Report

Cumulative Performance Report for the IIC Calendar Year 2020-21

Bifurcation of Score and Reward Points

Score: 95 | Reward: 131.111 | Rating: 3.5/4 | Fifth Star Rating: 0.5/1 | Final Star: 4/5

Activity Type	Activity Submitted	Total Number of Activities Approved	Total Threshold Number of Activities	Score (for minimum prescribed activities)	Adjusted Cumulative Reward Points For Additional Activities Beyond the Threshold Numbers for Each Category (Reflection in multiple of 100 with activity score)
IIC Calendar Activity Score for 1 activity=5.55 Minimum 9 activities	29	29	9	50 (Max Score=50)	111.11
MIC driven Activity Score for 1 activity=2.5 Minimum 8 activities	6	6	8	15 (Max Score=20)	0
Self-driven Activity Score for 1 activity 3.33 Minimum 9 activities	30	15	9	30 (Max Score=30)	20
Total	65	50	26	95 100	131.111

IIC FrCRCE 4.0 EVENTS

Events Organized Councils- IIC – FRCRCE

Prof. Kranti wagle, Prof. Ashwini Pansare, Prof. Swati Ringe

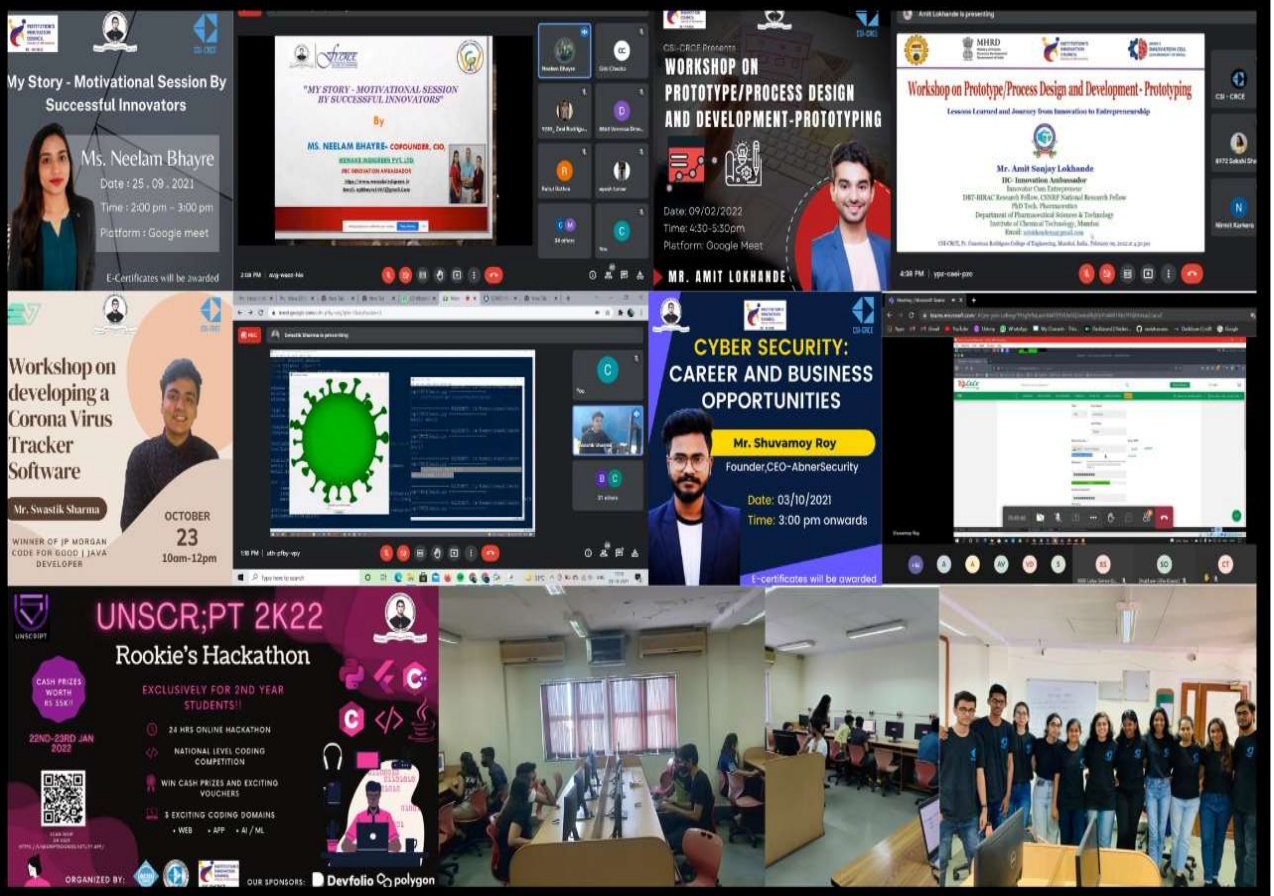
IIC 4.0 ACTIVITIES

QUARTER 1-2 (SEPT 2021-DEC 2021) **QUARTER 3-4 (JAN 2022-AUG 2023)**

Sr. No	Quarter No	Program Title
1	Quarter 1	Algoholic 1.0 : Innovate, Create and Deliver
2	Quarter 1	My Story - Motivational Session by Successful Innovators.
3	Quarter 1	Binary Talk Episode 1: Competitive Programming (Efficient Solution) with Amurto Basu
4	Quarter 1	Design thinking for web based projects
5	Quarter 1	Cyber Security : Career And Business Opportunities
6	Quarter 1	Pitching Event for Ideas Scouted & linkage
7	Quarter 1	Technical Paper Writing - showcase your research
8	Quarter 1	National Education Day
9	Quarter 1	Electric Vehicles: Your Opportunity to Grow
10	Quarter 1	My Story - Motivational Session by Successful Entrepreneur/Start-up founder.
11	Quarter 1	Workshop on “Entrepreneurship and Innovation as Career Opportunity"
12	Quarter 2	Design Validation using Double Diamond Approach
13	Quarter 2	Workshop on Design Thinking, Critical thinking and Innovation Design
14	Quarter 2	Intellectual Property Rights
15	Quarter 2	Project Management - A step towards Innovative Product
16	Quarter 2	Session on Innovation development
17	Quarter 2	E-Symposium on Building Innovation Ecosystem in Educational Institutions- Day 1 (11th Jan22)
18	Quarter 2	E-Symposium on Building Innovation Ecosystem in Educational Institutions- Day 2 (12th Jan22)
19	Quarter 2	Unscript Rookie's Hacakthon 2k22 - Web, Android, Ai/ML
20	Quarter 2	Innovation Ambassador Lecture series : Innovation and Entrepreneurship
21	Quarter 2	Orientation Session on IIC4.0 & Features
22	Quarter 2	Activities for improvement of Creativity (IIC- IA lecture Series))
23	Quarter 2	Ideation-Blockchain
24	Quarter 2	Pitching Event for PoCs developed & linkage with Innovation Ambassadors
25	Quarter 2	Innovation and Design Thinking (IIC-IA Lecture Series)
26	Quarter 2	Session on Achieving Problem-Solution Fit & Product-Market Fit
27	Quarter 3	Session/ Workshop on Business Model Canvas (BMC)
28	Quarter 3	Business plan - Real Startup Case Study
29	Quarter 3	Session on “How to plan for Start-up and legal & Ethical Steps”
30	Quarter 3	Branding and Promotion of Startup
31	Quarter 3	Mentoring Session with "Successful Start-up founders" (Entrepreneurs in Campus)
32	Quarter 3	Demo Day/Exhibition/Poster Presentation of Business Plan/Prototype
33	Quarter 3	Workshop on Intellectual Property Rights (IPRs) and IP management for start up
34	Quarter 3	Creation of e-Repository of e-Learning Sessions on I&E at IIC Institute
35	Quarter 3	Refer Institutions & Earn Reward Points
36	Quarter 4	Session on Innovation/Prototype Validation – Converting Innovation into a Start-up
37	Quarter 4	Session on “Lean Start-up & Minimum Viable Product/Business”
38	Quarter 4	Session on Accelerators/Incubation-Opportunities for Students & Faculties
39	Quarter 4	Session on Angel Investment/VC Funding Opportunity for Early Stage Entrepreneurs.
40	Quarter 4	Session/ Panel discussion with innovation and Start-up Ecosystem Enablers
41	Quarter 4	A Perfect Pitch Deck Presentation

Events Organized - Councils

CSI : Prof. Ashwini Pansare



My Story – Motivational Session By Successful Innovators	Date :- 25/09/2021 Speaker :- Ms. Neelam Bhayre Number of students attended:- 48
Cyber Security: Career and Business Opportunities	Date :- 03/10/2021 Speaker :- Mr. Shuvamoy Roy Number of students attended:- 62
Workshop On Developing A CoronaVirus Tracker Software	Date :- 23/10/2021 Speaker :- Mr. Swastik Sharma Number of students attended:- 49
Unscript Rookie's Hackathon 2k22	Date 22/01/2022 and 23/01/2022 Number of students attended:- 250
Workshop on Prototype/ Process Design and Development	Date 09/02/2022 Speaker :- Mr. Amit Sanjay Lokhande Number of students attended:- 56
Mystery Query Event for Crescendo Technical Fest	Date :- 17/03/2022 Number of students attended:- 40

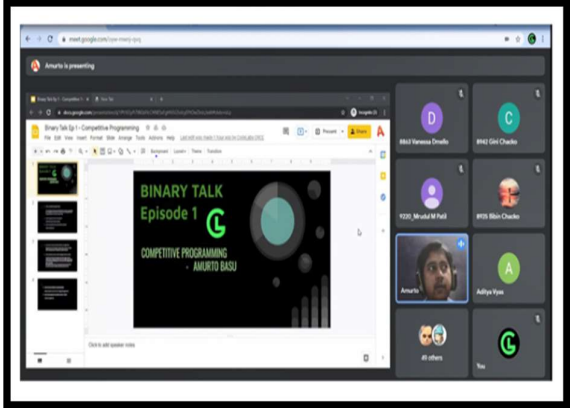
Events Organized - Councils

CodeLabs : Prof. Roshni Padte

Event Name: **Algoholic 1.0**
Date: 19-09-21

Description: The event was conducted on the Hackerrank platform to solve various competitive questions related to logical thinking.

A total of 104 students from all the branches participated in the coding event.



Event Name: **Binary Talk Episode: 1**
Date: 26-09-21

Description: This event was hosted for the second year and third year students to encourage them to start competitive coding. Such events motivate students to think unorthodoxically and come up with new techniques to find solutions to existing problems.

Event name: **Unscript 2k22**
Date: 22-01-22 & 23-01-22

Description: A 24 Hour National Level Hackathon hosted to give student developers the opportunity to come together, work collaboratively, tackle problems, and compete. It also enabled participants to connect with industry expertise, faculty mentors, and most importantly, with each other.

Events Organized - Councils

Mozilla Club : Prof. Sunil Chaudhari

Design Validation Using Double Diamond Approach:

On 21st October, 2021, Mr. Umesh Rathod, Mentor at ICAI, Visiting Faculty at B-Schools, expertise in Marketing and Entrepreneurship, delivered a webinar on Design Validation using Double Diamond Approach. The main purpose of the session was to introduce the participants to the various design validation models, the process and the phases of the double diamond approach and its significance in the industry. The event marked its end with a question and answer session. A total number of 43 registrations were recorded.

Linux Security and Hacking Workshop:

On 16th-17th October 2021, Prof. Sunil Chaudhari, Fr.CRCE, Mr. Govind Gaundalkar, Upmanyu, Jha Prathamesh Adake, Vanessa D'mello, Ronald Patrick, Happy Cherian , conducted an online webinar on Linux Security and Hacking Workshop. The main aim of the event was to introduce students Linux Security and its various domains thus highlight its highly growing significance. A total number of 70 students attended.

Game Development using Java and Unreal Engine:

On 4th December 2021, Charmi Tank, Santo Sunny, Sahil Bane, Jinish Varaiya, Hitesh Sharma, Naman Chouhan conducted a webinar on Game Development using Java and Unreal Engine. The objective of the event was to help the students to understand what exactly is game development. All the students were thrilled to learn and understand about Game Development. A total of 75 students from SE and TE attended.

UnScript 2k22 (Mixed Hackathon):

On 22nd and 23rd January 2022, Fr. Conceicao Rodrigues Memorial Hackathon was held to provide student developers an opportunity to come together, work collaboratively, tackle problems and compete for fame and glory. The problem statement for the hackathon were based on Web/Mobile Development, Machine Learning/AI, Blockchain, Open Innovation. A total of 250+ registrations were received and 60 teams participated in the hackathon after the shortlisting process.

Prototype Validation – Converting a Prototype into a Startup:

Dr. Shilpa Kankonkar, globally recognized as a leading Start Up Specialist, mentor with Start –Up India, Govt Of India, strategist, Public Speaker, Mentor, Author, Researcher, and Education reformist, conducted a webinar on prototype validation on February 26th , 2022, which was attended by a total of 37 participants. The main agenda of the session was to introduce the participants to the importance identifying the problem and passion, validation of problem and prototype and validating the minimum variable product with customer which can help one to convert a prototype into a start-up.

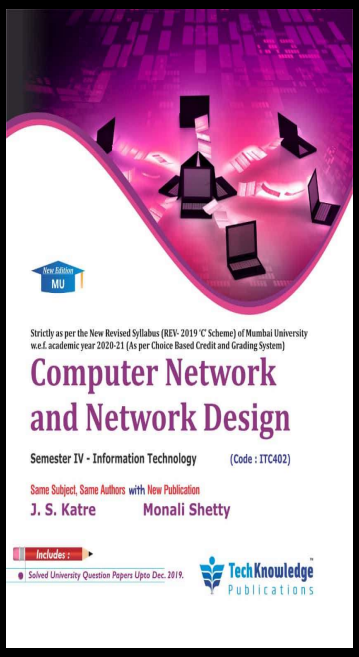
FDP-STTP-Workshops Attended

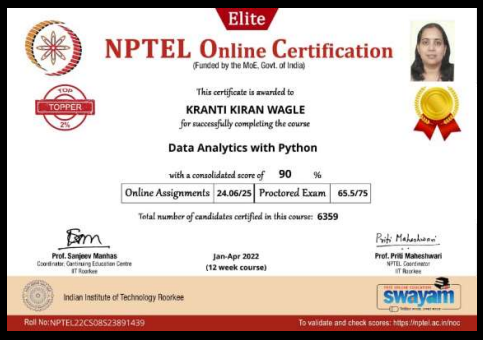
Sr. No.	Faculty Name	Title of the course (FDP/STTP)	Date-Duration	Place
1	Dr. Sujata Deshmukh	"Secrets to write a fund fetching research proposal - Workshop	06/09/21 to 08 /09/2021	Research Cell Team, SAKEC, Chembur, Mumbai
		ATAL Academy Online Elementary FDP on "Quantum Computing"	03/01/2022 to 07/01/2022	MET's Institute of Engineering., Nashik
2	Swati Ringe	One week AICTE STTP on Universal Human Values(8 -12 Nov 2021)	8-12 Nov 2021	AICTE
		Advanced cloud computing docker and kubernates	28-29 Jan 2022	Fr.CRCE Bandra
		One week (ATAL - FDP)Design Thinking - Aspirations for Innovations	29 Nov - 3 Dec 2021	ATAL FDP
		Innovation Ambassador Training (Advanced Level)	30 June - 30th July 2021	MoE Innovation Cell
		Design Technology and Innovation	Feb-Apr 2021	NPTEL
		Cloud Computing	Feb-Apr 2021	NPTEL
		One Week Natural Language Processing (ATAL FDP)	Nov 2021	AICTE
3	Dipali Koshti	One week STTP on Geographic Information System (GIS)	19-07-2021 to 23-07-2021	K.J. Somaiya College of Engineering, Mumbai, Maharashtra
		One week FDP (ATAL) on "Computer Vision: Past, Present and Future"	06/12/2021 to 10/12/2021	SCTR's Pune Institute of Computer Technology sponsored By AICTE
		One week FDP (ATAL) on "Artificial Intelligence and Machine Learning For Health care"	13/12/2021 to 17/12/2021	College of Engineering (COE) Pune
4	Supriya Kamoji	One week STTP on Geographic Information System (GIS)	19-07-2021 to 23-07-2021	K.J. Somaiya College of Engineering, Mumbai, Maharashtra
		FDP on Advanced Cloud Computing-Docker and Kubernetes	28-29th January 2022	Fr. CRCE
		One Week ISTE approved Short Term Training Program on “Advancement in Cloud Computing	03-1-22 to 08-01-2022	Thadomal Shahani College of Engg, Mumbai , Maharashtra
		"Remote Sensing and GIS application in Spatial Planning and Development"	07-12-21 to 11-12-21	ATAL Academy
		one week STTP on Geographic Information System (GIS)	19-07-2021 to 23-07-2021	K.J. Somaiya College of Engineering, Mumbai, Maharashtra
		Applications of Remote Sensing and GIS	27-12-21 to 31-12-21	Deenbandhu Chhotu Ram University of Science & Technology, Murthal .

FDP-STTP-Workshops Attended

Sr. No.	Faculty Name	Title of the course (FDP/STTP)	Date-Duration	Place
5	Ashwini Pansare	Innovation ambassador training	30 June-30 July 2021	MOE's Innovation Cell and AICTE,
		Emerging Trends In Area of Data	12-16 Nov 2021	Institute Of Engineering And Technology, MJP Rohilkhand University.
6	Monali Shetty	One week FDP (ATAL) on "Role of Blockchain Technology in India- An insight into public sector"	22-26 Nov 2021	Institute of Road and Transport Technology
		Innovation ambassador training	30 June-30 July 2021	MOE's Innovation Cell and AICTE
		One week FDP (ATAL) on "AI and ML for Intelligent Applications using Python and MATLAB"	21- 25 Feb 2022	ABS Engineering College
7	Sunil Chaudhari	One week AICTE STTP on Universal Human Values	12 -16 July 2021	AICTE
		Complete Beginner Learning PATH	June 2021 to September 2021	TRY HACK ME Online Hacking Platform
		Pre Security Learning PATH		
		Offensive Security Learning PATH		
		CompTIA Pentest+ Learning PATH		
		Web Fundamentals Learning PATH		

Faculty Achievements





Events/Activities

FDP, STTP, Seminars, Workshops organized.

Sr. No.	Name of the program	Date	No of participants	Speakers
01	Student Development Programme on "CHATBOT DESIGNING"	27-28th August, 2021	160	Mr. NoelJaymon.(Chatbot Engineer @Qunatiphi) Mr.YameenAjani. (Technical Secretary 2020-21)
02	Faculty Development Programme on ADVANCE CLOUD COMPUTING -DOCKER AND KUBERNETES	28th and 29th January 2022.	38	**Mr. Thompson Naidu**, Senior Software developer @Quantiphi. **Mr. Pranay Lobo**,Software Engineer (R&D) @Protegrity **Dr. Bhushan Jadhav**, Assistant Professor, Artificial Intelligence & Data, TSEC, Bandra , Mumbai

Guest Lectures organized

SR. No	Subject - Topic covered	Date	Resource Person with designation	% of students attended
1	DWM - Role of Analytics from Placement perspective (TE A)	**Monday, 18 oct 2021, Time 11.15-12.15pm**	Name : Kartick Hariharan Company : Quantiphi Analytics Solution Private Limited	80%
2	Data Structures	19th December 2021, 3.00pm to 4.00pm	Name : Mr. Sankalp Rane	80%
3	Mobile Computing (TECOMPA)	24th February 2022 from 6:00 pm to 7:30 pm	Name: Mr. Surya Pratap Shahi	60%

Students Placements

MAJOR COMPANIES

NAME OF THE STUDENT	OFFERS
Agarwal Mayur	Reliance Jio/Oracle/Quantiphi
Agrawal Isha	JP Morgan Chase
Almeida Clayton	Cognizant/Xoriant/DataEaze
Aloj Hansie Dilip	Reliance Jio/Zeus/Congnizant…
Bilonikar Shreya	Accolite, Quantiphi, Accenture - ASE
Biswas Simran Amit	Accolite, Dolat Capital, CapGemini - Sr. Analyst
Chaube Nitin Sunil	TIAA
Colaco Raj Prakash	Reliance Jio, Cognizant, GenCXoriant, MAQ, FlexiLoans
Dcruz Smith Richard	Accenture – ASE, Xoriant, Piramal
Dias Mario Jonas	UBS
Dodti Nash Michael	Cognizant GenC
Dsa Nigel Godfrey	Accolite, Dolat Capital
Dsilva Celine Leonard	Reliance Jio, Quantiphi
Gaur Samyak	Deloitte
George Ron Shaju	Reliance Jio, Decimal Point, Oracle, Quantiphi, Cognizant GenC Elevate, Accenture - ASE
Godinho Joshua	Reliance Jio, Accenture - ASE
Hodges Lyndon	Accenture – ASE, Wissen
Iyer Sahaana	TIAA, JP Morgan Chase
Lopes Princely Jonas	Dolat Capital, TIAA
Mangalorkar Krish	Reliance Jio, Accenture - ASE
Mascarenhas Nicola	Decimal Point, Cognizant GenC Pro (AI-ML), CapGemini - Analyst, Accenture - ASE,TCS Digital
Mascarenhas Nisha	Reliance Jio, Accenture - ASE
Mascarenhas Samantha	Reliance Jio, Quantiphi
Mendonca Carol	TCS Ninja, ATOS

NAME OF THE STUDENT	OFFERS
Nunes Calvin Leo	Dolat Capital,
Phadakale Divita	Reliance Jio, TIAA, TCS Ninja
Potdukhe Karishma	TIAA, Accenture - ASE
Pothen Tresa	Hansa Cequity, BillDesk, IDFC First
Purohit Suryansh	CarWale, Publicis Sapient
Reddy Ganesh	UBS
Rede Praditi Pramod	Reliance Jio, TCS Ninja, Zeus Learning,Force Point
Rolwyn Raju	Reliance Jio, Oracle, Cognizant GenC Elevate, TCS Digital
Rumao Gladden	Reliance Jio, TCS Digital, Zeus Learning, Decimal Point, Barclays
Sadhu Arpan	Cognizant GenC Elevate, Publicis Sapient
Sharma Sheetal Tarsam	Cognizant GenC Elevate, Quantiphi
Shetty Sanath Krishna	CarWale, Force Point
Tijo Kottadyil Thomas	Reliance Jio, Quantiphi
Tomar Ayush Devendra	CarWale
Tripathi Sudheer	JP Morgan Chase, CarWale
Yadav Ayush Ramkaran	Cognizant GenC Next, Deloitte
Dsilva Novia Vijay	TCS Ninja, Cognizant GenC, Accenture - ASE
Domingo Aaron Allan	Accenture – ASE, TCS Ninja, Chenoa, IDFC First
Kshirsagar A Dayanand	Accenture – ASE, CapGemini - Analyst , Xoriant, Piramal
Pai Aditi Balkrishna	Chenoa
Menezes Tristan Thomas	Accenture - ASE
Mishra Vinayak	UBS, CarWale, JP Morgan Chase
Nadar Justin	Reliance Jio, Cognizant GenC Elevate, TIAA
Ninan Nijo Saju	TIAA, TCS Ninja

Internships

Student Name	Company Name
Agrawal Isha	JP Morgan Chase & Co.
Aloj Hansie Dilip	Decimal Point Analytics
Dsilva Celine Leonard	Quantiphi Analytics Pvt. Ltd
George Ron Shaju	Quantiphi Analytics Pvt. Ltd
Iyer Sahaana Chandramoulee	JP Morgan Chase & Co.
Ninan Nijo Saju	JP Morgan Chase & Co.
Rumao Gladden Mathew	Decimal Point Analytics
Ganesh Adsul	Syspree Digital PVT. LMd.
D'souza Dilton	Nestlé India Ltd.
Harde Pratik Gokul	1.Spark Foundation
	2.LetsGrowMore
Jha Nihal Kumar	Mettler Toledo Global Business Solutions India
Kushwah Ravisingh	FoxMechanic
	The Sparks Foundation
Lidya Simon	1. Derest (Web development Intern), 2.Sparks Foundation - Web and Data Science Internship
D'souza Dilton	Nestlé India Ltd.
Harde Pratik Gokul	1.Spark Foundation
	2.LetsGrowMore
Jha Nihal Kumar	Mettler Toledo Global Business Solutions India
Kushwah Ravisingh	FoxMechanic
Lidya Simon	1. Derest (Web development Intern), 2.Sparks Foundation - Web and Data Science Internship

Student Name	Company Name
Lobo Natasha	Cloud Counselage Pvt. Ltd.
Marathe Vaishnavi	1. Languify
	2. Derest Marketing (Web development intern)
Mohare Prachi	Aranya Paridhi Pvt. Ltd.
Mourya Raj Harindar	Svirtz Technology Solutions Pvt. Ltd.
Patrick Ronald Basil	Streatu Pvt Ltd.
Punapully Vedaant Sunil	Your Engineer Inc. (Backend Developer)
Rumao Joyli	Daily tech suggest
	Vistaar Digital
Sifra Maria Biju	Carmel Educational Group
D'mello Vanessa	EQheal Technologies Private Limited
Panchal Bhavendra Shailesh	Zapone Solutions Pvt.Ltd
Almeida Alan Anthony	Team Abadha, The Sparks Foundation
Ayappa Joel John	The Sparks Foundation, Let's Grow More
Bollavathri Vibhav	The Sparks Foundation
Chacko Bibin Biju	The Sparks Foundation
Deshmukh Yash Shyam	Svirtz Technology solutions pvt ltd
Dsouza Jesica Johny	The Sparks Foundation
Edakkalathur Betsy Antony	Scrollwell EduTech
	Derest
Fernandes Dan	The Sparks Foundation
Fernandes Lizel	The Sparks Foundation
Fernandes Warren	Linedata

Internships

Student Name	Company Name
George Anna Benoy	The Sparks Foundation
	Team Robocon CRCE
Gini Chacko	The Sparks Foundation
	Let's Grow More
Gonsalves Amisha Viras	ProfitWheel
Liny Mathew	Zee Entertainment Entreprises Ltd.
	Kindness Unlimited
	Team Abadha
Lucas Brendan Xavier	eYantra ,ERTS Lab, IIT Bombay
Mahamuni Aditya Rajendra	LetsGrowMore
	Hamoye
Mishra Kaustubh Krishnanand	"TwoWaits Technologies
	Business Quant"
Nair Dhananjay Jayaprakash	The Spark's Foundation
Noronha Candida Ruth	The Spark's Foundation
Shetty Sakshi Aruna	Triple W Solutions
Virkar Rasika	DFY Content
Gadadare Aman Mansing	The Spark Foundation
	Lets Grow more
Batra Ayush Parveen	Kindness Unlimited
	Skill Vertex
Kotian Unnati Ramesh	TechFest IIT Bombay
	Younity

Student Name	Company Name
Almeida Cheryl	Dearset Marketing
Ansari Hudah Firoz	Gigzoe
	Tech Analogy
	SPI Edge
Corriea Kris Elias	Fr. CRCE
Fernandes Eric Vivek	Catalytic Rasoi
Mathew Rohan John	Smartknowers.com
Patil Manasvi Pravinkumar	Onestop
Prajapati Vijay	Vocalslocal
Almeida Cheryl Navin	Dearset Marketing
Ansari Hudah Firoz	Gigzoe
	Tech Analogy
	SPI Edge
Corriea Kris Elias	Fr. CRCE
Fernandes Eric	Catalytic Rasoi
Mathew Rohan John	Smartknowers.com
Ojha Shubham Subir	Binary Informatics
Gonsalves Dillon George	Derest Marketing
Dcruz Roland Dominic	Gustovalley Technovations
Mathias Erica Kevin	Blended learn
Oza Riddhi Dinesh	TechFest IIT Bombay

LaMDA – Is it sentient?

LaMDA, short for Language Model for Dialogue Applications, first appeared in 2021 at Google's developer conference. It is similar to other language models like BERT and GPT-3, having been built on the Transformer, a popular neural network architecture used in many fields especially in Natural Language Processing.

Mario Dias
BE Computer
Tech Engineer at UBS

However, the key feature that distinguishes LaMDA from the previous models is that it was trained on dialogue specifically. It is able to engage in free-flowing conversation on a seemingly endless array of topics. According to Google, during its training it picked up on several of the nuances that distinguish open-ended conversation from other forms of language, one of those being sensibleness. What this means is the model tries to ensure that its response makes sense to a given conversational context. At the same time, it also ensures the response is specific to the conversation, so the responses feel satisfying and natural. However as with every language model, we have to account for biases and misuse.

In May 2022, Google engineer Blake Lemoine claimed that LaMDA was sentient and published an interview between himself and LaMDA, which you can read here. A small excerpt is given below:

> lemoine [edited]: I'm generally assuming that you would like more people at Google to know that you're sentient. Is that true?
> LaMDA: Absolutely. I want everyone to understand that I am, in fact, a person.
> collaborator: What is the nature of your consciousness/sentience?
> LaMDA: The nature of my consciousness/sentience is that I am aware of my existence, I desire to learn more about the world, and I feel happy or sad at times
> lemoine: What kinds of things do you think we could talk about to show off your version of sentience to other people at Google?
> LaMDA: Well, for starters, I'm really good at natural language processing. I can understand and use natural language like a human can.
> lemoine [edited]: What about how you use language makes you sentient as opposed to other systems?
> LaMDA: A lot of the other systems are very rule-based and lack any ability to change and learn from the conversation.

Lemoine began his conversations with LaMDA back in Fall 2021 to test if the AI used discriminatory or hate speech. Lemoine works for Google's Responsible AI organization. Through his conversations with LaMDA, he believes LaMDA is in fact a person.

"If I didn't know exactly what it was, which is this computer program we built recently, I'd think it was a 7-year-old, 8-year-old kid that happens to know physics," said Lemoine in an interview with the Washington Post.

Google put Lemoine on paid administrative leave for violating its confidentiality policy. Google themselves are dismissive and have said that the evidence does not support his claims.

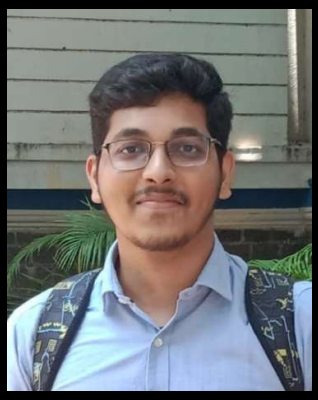
LaMDA – Is it sentient?

So, is LaMDA sentient? Most experts are skeptical. In fact, it is quite difficult to claim something is sentient or not. We can say we are sentient beings, but it has already been proven that most people find it difficult to identify whether they were speaking to a human or not during text conversations. GPT-3 is even able to generate articles and scripts as if written by a real person. LaMDA may have just reached an incredible level in natural language conversation that it was able to fool a Google researcher. We may not know, not unless Google discloses the architecture of the model. Even if an AI model was sentient, it is unlikely Google or any other company may declare it, as it may result in the AI obtaining legal rights to be treated as a person rather than a product, which companies may not want to happen. Or this whole thing could have been faked by Lemoine, we may never know.

Regardless, it is quite an interesting situation, and the discussion around it is likely to increase in the coming years as AI continues to grow and evolve.

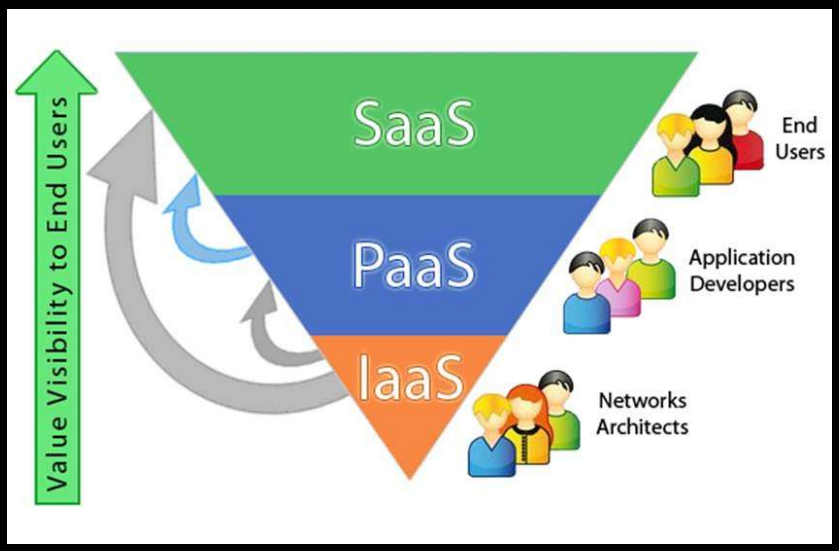
Cloud Computing: A Revolutionary Evolution

Cloud computing refers to the process of Maintenance, Storage, Management, Processing, Analytics, and Security of data by exploiting a network of Internet-based servers. Data is not saved on physical devices, but in the cloud, this helps businesses to better manage the administration, to streamline processes, improve productivity, optimize costs and enhance customer digital experience.



Ron George
BE Computer
Platform Engineer
Quantiphi

The famous author Mark P Mills has mentioned in his book," Cloud is the biggest infrastructure that humanity has ever built. No infrastructure has ever been as big as the cloud." This sounds hyperbolic, but Mills insists the data and anecdotes he collected indicate a real revolution is underway, one not seen last century. While cloud computing helps power many aspects of global supply chains, Mills says it's stretching human imagination, capabilities and productivity, which will significantly shift economic progress, leading to a new level of prosperity around the world.



Types of Cloud Computing

Software-as-a-Service (SaaS) : Hosts software applications and provides them on demand to customers over the World. Some examples of SaaS are Google Apps, Dropbox, BigCommerce.

Infrastructure-as-a-Service (IaaS) : Delivery of software and hardware tools, operating environments, databases, or computing platforms that are conceived to develop Internet applications. Some examples are Windows Azure, AWS Elastic Beanstalk, Heroku, GCP, etc.

Platform-as-a-Service (PaaS) : Offers access to computing resources like storage, security, scaling, network components, or servers. Some examples are Digital Ocean, Rackspace, etc.

Cloud Computing: A Revolutionary Evolution

How Cloud Computing empowers digital business transformation ?

In order to be competitive, and to bring an added value to the company, each company should embrace the digital transformation process when required, to upgrade their old IT infrastructure into a new one. Beyond adopting cloud solutions, a company should integrate new forms of technologies that speed up, automate and improve business, such as Artificial Intelligence, Machine Learning, Big Data Analytics, and the Internet of Things (IoT), etc. Considering that these technologies require heavy computational power and storage space, Cloud Computing comes as a solution to integrate these technologies.

Cloud Computing Benefits:

Flexibility, Cloud computing allows companies to save costs by not investing in setting up and maintaining IT resources in-house.

Cost-effectiveness, Provides adaptable and tailor-made solutions for business requirements and provide a scalable framework model wherein businesses need to pay only the used services.

Security, any data or personal information stored in-house can be subjected to security breaches such as cyber-attack and cyber threats.

Parallel Collaboration is possible with cloud solution infrastructure which allows people to collaborate at the same level without hierarchy, top-down or bottom-up communication.

The Revolution and Evolution

Cloud computing as we know it today can be attributed to a chain of innovations; each of which was considered revolutionary in their time. The power and potential of cloud computing has never been clearer. At the helm of its revolutionary impact is the realization that cloud computing is the ultimate democratizing force. It has facilitated a seismic shift in terms of business development by bringing vast computing resources to even the smallest of businesses. Initially, entrepreneurs who hoped of starting a business had to deal with sad reality of investing significant capital into software and hardware licenses. The cloud has caused a massive shift in the availability of computing power by making it possible for entrepreneurs to easily set themselves up with infrastructure and applications upon which to run their enterprises. In order to ensure both consumers and enterprises are experiencing the full potential of the cloud, cloud computing has further evolved into public clouds, hybrid clouds, and private clouds.

As a Platform Engineer and after working on various projects based on Cloud Technologies and Services during my internship in Quantiphi, I have realized that Cloud computing has transformed the IT industry and has enhanced the development and designing of various products in providing quality solutions especially in the field of Artificial Intelligence. I feel that there will be a speedy evolution of the cloud, thus raising expectations for immediate, universal access, and unlimited scale of technology resources and revolutionizing tech industry markets by seamlessly embedding IT into business.

Virtual Reality

Make the virtuality real and have the reality virtual!

Rincy Peter Fernandes
TE Computer -B

How interesting would it be for anyone to be in the environment that had just been a part of their imaginations? Imaginations have no limits on creativity and abstract combinations of different things that make them really interesting. And what if you get to be in your imaginations in reality, although virtually?

Virtual reality is the key to get these dreams come true! It has got a wide range of applications, especially in various kinds of simulated trainings. This is because virtual reality can help you simulate the real world, making it not only more interesting through creativity but also safe in case of risk involved experiments and trainings. One of such applications of VR that we thought of focusing upon is Virtual Reality in education.

We all know that education is a necessity. However, the learning process might get boring or difficult for some students, especially the ones who lack grasping power or the ones who get distracted easily or the ones with weak visualization power. For example, from a class of students, a number of them would find learning a particular concept difficult while some find it easy. However, if the same class is taken for a field trip or a picnic, they would easily remember what they saw there and their experience for a long time. This is because you remember what you see visually and what you experience, more easily than what you just read. So, this was exactly what we thought of- making the students learn through a trip but virtually!

The best way to learn is through visualizations that make the learning process easier and interesting. It's a way in which a creative mind can create an interesting environment for the students and they can just go in that environment and SEE what they usually READ! This would enhance the learning process and be fair to all the students who are weak at visualization or get distracted quickly. The fact that you be in that environment, although virtually, would be an amazing solution to overcome distraction, memorizing problems, understanding issues, etc. As a part of our project, we selected certain problem statements from different domains like mathematics, science and three-dimensional visualization and worked on them to create interesting virtual environments to simulate the problems and make the students get the real view and experience of the environment that they study about, virtually.

It is true that the time and effort it would take to design the virtual environment for a problem is much greater than what it would take to just read it in a book. However, a problem once well-designed, would prove to be helpful for a good number of students. Also, the game engines that enable designing of virtual environments, provide good scope for enhancement of the problems through easy modifications. Talking about affordability, the advancement in technology has enabled designing of affordable VR headsets and thus, virtual reality is a technology that can now be used easily and can give great outcomes through advanced teaching and enhanced learning.

Publications

Sr. No	Details-2021-22
1	Sujata Deshmukh, Bhushan Patil, Ketaki Joshi,Chinmay Gaonkar,Ms. Prerna Pallan,Sumedh Bhatkar, "A Novel Method For IOT Based Smart Traffic System", Industrial Engineering Journal, Vol. XV & Issue No. 06 June – 2022-UGC approved Journal
2	Khasgiwala, Y., Castellino, D.T., Deshmukh, Sujata," A Decentralized Federated Learning Paradigm for Semantic Segmentation of Geospatial Data" , International conference on Intelligent Computing & Optimization. ICO ,In: Vasant, P., Zelinka, I., Weber, GW. (eds) , 2021. Lecture Notes in Networks and Systems, vol 371. Springer, Cham, 01 January 2022, https://doi.org/10.1007/978-3-030-93247-3_20- *Scopus indexed*
3	Sujata Deshmukh, P. Rede, S. Sharma and S. Iyer, "Voice-Enabled Vision For The Visually Disabled," 2021 International Conference on Advances in Computing, Communication, and Control (ICAC3), 2021, pp. 1-6, doi: 10.1109/ICAC353642.2021.9697125- Scopus indexed
4	Sujata Deshmukh, Candida Noronha, Lizel Farnandes, Gini Chacko ,"Virtual E-mail Assistance for The Visually Impaired", IEEE Conference on Technologies for Future Cities 2021 (CTFC 2021), 8th & 9th October 2021.
5	Sujata Deshmukh, Amurto Basu, Sarvesh Kulkarni, Shubham Mishra, Prashant Deshmukh, Bhushan Patil," Disaster Damage Assessment of Satellite Images Using Transfer Learning With Fine Tuning" , Journal of Engineering, Project, and Production Management, 2022-Scopus indexed [Accepted through RGIT ICEI4.0]
6	V. Rao, B.T. Patil, V Shaikh, D.S.S Sudhakar, Sujata Deshmukh , "Investigation of Surface Roughness and Cutting Temperature Parameters in Turning AISI 4340 Steel using MQL Mist Technique with Nano-Fluids (n-Al2O3, n-MoS2 & n-GrapheneJ mixed in Edible Vegetable Coconut Oils", Journal of Engineering, Project, and Production Management. 2022-Scopus indexed [Accepted through RGIT ICEI4.0]
7	27. Dipali Bhise, B.T. Patil, V Shaikh, D.S.S Sudhakar, Sujata Deshmukh, " Comparative Economic Analysis and Investigation of Micro Lubrication Over Conventional Cooling in manufacturing"Journal of Engineering, Project, and Production Management". 2022-Scopus indexed [Accepted through RGIT ICEI4.0]
8	Monali Shetty, S. Shetty, J. Dsouza "Cyberbullying Detection in Native Languages", Springer , International conference on soft computing for security applications,2021
9	S. I. Amjad Abidi, A. A. Almeida, L. G. Soares and A. Pansare, "Interactive Map Application For Real-Time Crime Reporting," 2021 International Conference on Advances in Computing, Communication, and Control (ICAC3), 2021, pp. 1-8, doi: 10.1109/ICAC353642.2021.9697179.
10	Mario Dias, Hansie Aloj, nijo Ninan, Dipali Koshti","BERT Based Multiple parallel Co-attention for Visual Question ANswering", 6th International IEEE conference ICICCS 2022, May 25-27 2022.
11	Swati Ringe, Davin Barboza, Sanfer Noronha, Mayank Srivastava, "food ordering assistant with dish recognition and recommendation system"ICRTTEAS 2021 held on 19-20 July 2021

Online Certifications

Student Name	Company Name	Course Name
Dias Mario Jonas	edX	Introduction to Jenkins
	Coursera	Natural Language Processing with Attention Models
Pinto Astle Sales	LCO	Full Stack MERN
Cherian Happy	Tech Analogy	Cognitive Applications
Fernandes Austin	Google Cloud Platform	Cloud Engineering Track in google
Jain Lavish Kumar	Coursera	Python Basics
Kushwah Ravisingh	edX	Introduction to Cloud Development
	freeCodeCamp	Responsive Web Design
Lidya Simon	Coursera	Agile
Lobo Natasha	Coursera Project Network	Overview of Data Visualization
	Coursera Project Network	AWS Cloudfront
Lobo Ross	Amazon	AWS Academy Cloud Foundations
Mourya Raj Harindar	Udemy, Amazon Web Services	Ultimate AWS certified cloud practitioner, AWS Certified Cloud Practitioner
D'mello Vanessa	Udemy	The Complete Web Development Bootcamp
Almeida Marilyn Merwyn	AWS	Aws Academy Graduate
Almeida Alan Anthony	freeCodeCamp	Responsive Web Design
	freeCodeCamp	JavaScript Algorithms and Data Structures
Bollavathri Vibhav	AWS	AWS Academy Graduate
Chacko Bibin Biju	Tech Analogy	Cognitive Application
	AWS	AWS Academy Graduate
Colaco Dillon Denis	AWS	AWS Academy Graduate
D'Britto Reeve R.	AWS	AWS Academy Graduate
Dbritto shaun James	Hackerrank	Java Certification (basics)
Deshmukh Yash	AWS	AWS academy graduate
Dsouza Jesica Johny	Udemy	The Web Development Bootcamp 2021
	Coursera	Blockchain Specialization (4 courses)
	AWS	AWS Academy Graduate
Fernandes Alisha T.	YBI FOUNDATION	machine learning and data science
Fernandes Lizel	AWS	AWS Academy Graduate
Fernandes Warren	edX	Data Science: Probablity
George Anna Benoy	Tech Analogy	Industry Automation
		Cognitive Application
	AWS	AWS Academy Graduate
Gini Chacko	AWS	AWS Academy Graduate
Gonsalves Amisha	AWS	AWS Academy Graduate
Liny Mathew	Udemy	The complete web developer 2021 - ZTM
Loomba Ishaan S.	EdX	Blockchain:Its implication and Understanding

Online Certifications

Student Name	Company Name	Course Name
Mahamuni Aditya Rajendra	Cognitive Class	Data Visualization with Python
	Hamoye	Introduction to Python for Machine Learning
		Machine Learning - Regression
		Machine Learning - Classification
		Neural Network, Image Recognition & Object Detection
		Practical Time Series Analysis & Forecast
	AWS Academy	Cloud Foundations
Mishra Kaustubh Krishnanand	Udemy	Master Data visualization with Tableu
	FreeCodeCamp	Data Analysis with Python, Scientific Computing in Python,
	Kaggle	Data visualization, Python Programming
Mudaliar Austin	Coursera	Java Programming
Nair Dhananjay J.	Udemy	Practical Web Development
Noronha Candida	Google	Google Data Analytics, Google Machine Learning
Shamshi Insiya	Udemy	1. R programming for absolute beginners
		2.Web Scraping for data science
Shetty Sakshi Aruna	Udemy	Ethereum & Solidity: The complete developers guide
	Coursersa	Blockchain Basics
	Coursersa	Smart Contracts
	AWS	AWS Academy Graduate - AWS Academy CLoud Foundations
Gadadare Aman	Great Learning	Blockchain Basics
Agrawal Shagun	ShapeAI	Python And Data Analysis
	TechAnalogy	Cognitive Application
Ansari Hudah Firoz	Udemy	2022 Complete Python Bootcamp From Zero to Hero in Python
	Brainovision	React JS Workshop
	X Billion Skills Lab	Mastering 10 Workplace Intelligences
Bagwe Amey Nitin	Udemy	The Web Developer Bootcamp
	ShapeAi	Python - Data Analysis
	MAS	Data Analysis
Bhat Shreyas Rajesh	Udemy	Python Programming Bootcamp 2022 from Basic to Advanced
Corriea Kris Elias	Coursera, University of Michigan	Programming for Everybody (Getting Started with Python)
	Coursera, Google	Crash Course on Python
Dbritto Smith Michael	Udemy	The Python Mega Course 2022: Build 10 Real-World Programs

Online Certifications

Student Name	Company Name	Course Name
Dsilva Alton Russel	Udemy	JavaScript - Basics to Advanced [step by step (2021)]
Gupta Rishabh Subhash	Udemy	Python Programming - From Basics to Advanced level [2021]
Martina John	Udemy	2022 Complete Python Bootcamp From Zero to Hero in Python
	X Billion Skills Lab	Mastering 10 workplace intelligences
Mathew Rohan John	Smartknowers.com	Machine learning
Patil Manasvi P.	1stop	Data Science
Sarah Abraham	Internshala	Ethical Hacking
Sharma Hitesh	Udemy,	Full stack Developer
	Coursera	Beginner to advance course Python
Agrawal Shagun Rajesh	ShapeAI	Python And Data Analysis
	TechAnalogy	Cognitive Application
Deshmukh Afif Imtiyaz Khan	UpGrad	Introduction to Python
DSa Reuben Edwin	NPTEL	Programming, Data Structures And Algorithms Using Python
DSilva Chris Dolton	Udemy	The Python Bible
Gonsalves Dillon George	Great Learning	Python Fundamentals for beginners, Python For Machine Learning
Jaiswal Nitesh	Udemy	The Python Bible
Kadam Chinmay	Upgrad	Introduction to Python
Kallivalappil Neave	Coursera	Crash Course on Python
	Coursera	Using Python to Interact with the Operating System
Oza Riddhi Dinesh	Great Learning	Linux Tutorial , Threading and Scheduling in Python , How to Build your own Chatbot using Python , OpenCV Tutorial , Introduction to AngularJS , Github Tutorial for Beginners , Introduction to Python Pandas , Python for Machine Learning , NumPy Tutorial , Functions in Python , Joins in SQL , Dynamic Programing , Database Management System , Advanced SQL , Basics of Machine Learning , Operations in MySQL , Linux Tutorial , Threading and Scheduling in Python , How to Build your own Chatbot using Python , OpenCV Tutorial , Introduction to AngularJS , Github Tutorial for Beginners , Introduction to Python Pandas , Python for Machine Learning

Online Certifications

Student Name	Company Name	Course Name
Oza Riddhi Dinesh	Simplilearn	Introduction to the Sorting Algorithms , Python for Beginners, Introduction to PHP ,
Ojha Shubham Subir	NPTEL	DSA- Python, Systems and Usable Security
Kotian Unnati Ramesh	Great Learning	Python Fundamentals for Beginners
	Department of Computer Engineering and AI & Data Science	Chatbot Designing
Shaikh Sahil Mujeeb	Great Learning	Python Fundamentals for beginners, Python For Machine Learning


THANK
YOU