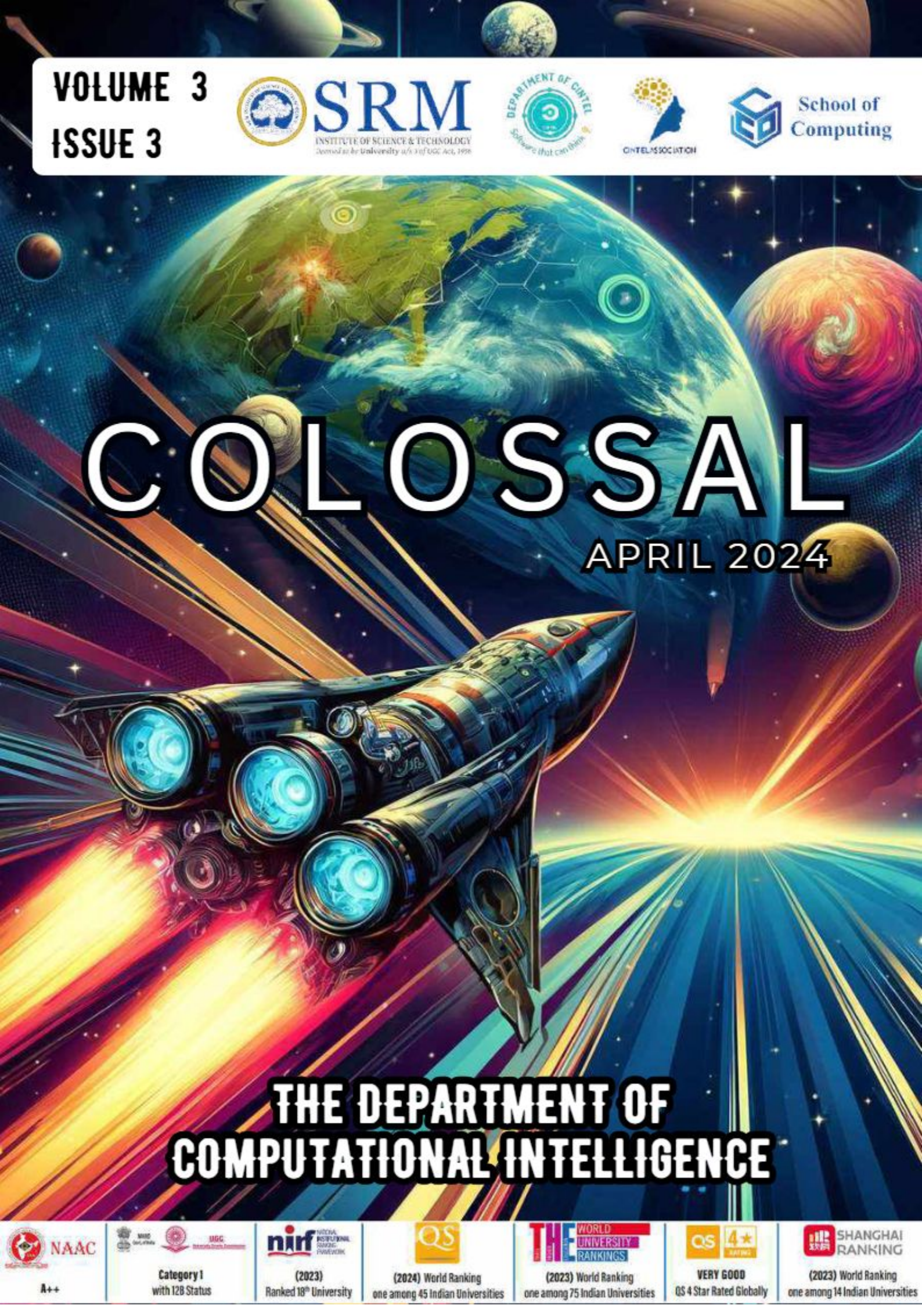
VOLUME 3
ISSUE 3

SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
Deemed to be University u/s 3 of UGC Act, 1956

DEPARTMENT OF CINTEL
Software that can think

CINTELASSOCIATION

School of Computing



COLOSSAL

APRIL 2024

THE DEPARTMENT OF COMPUTATIONAL INTELLIGENCE

NAAC
A++

UGC
Category 1
with 12B Status

nirf NATIONAL INSTITUTIONAL RANKING FRAMEWORK
(2023)
Ranked 18th University

QS
(2024) World Ranking
one among 45 Indian Universities

THE WORLD UNIVERSITY RANKINGS
(2023) World Ranking
one among 75 Indian Universities

QS 4★ RATING
VERY GOOD
QS 4 Star Rated Globally

SHANGHAI RANKING
(2023) World Ranking
one among 14 Indian Universities

EDITOR'S VOICE

"Success is the Sum of Small Efforts; Repeated Day in and Day Out."

Dear Confidants!

Enthusiastic meeting with all of you after the first quarter of 2024! The Secrets of Success is a mystery many times!!!

Shakuntala Devi, The Human Computer had humble beginnings. Here are some unknown facts about her. Her father was a circus artist. She was 3 when her father noticed her memory as she was remembering playing card sequences. Shakuntala Devi performed on the streets with her father, solving complicated math problems without formal instruction. She performed at the University of Mysore, Annamalai University, Vishakapatnam, and Hyderabad at the age of 6.

BBC host Leslie Mitchell offered Shakuntala Devi a difficult math problem on October 5, 1950, and she completed it in seconds, but it didn't match. Shakuntala Devi gave the correct response after the previous answer was wrong. She famously calculated the 23rd root of a 201-digit number in 50 seconds at Southern Methodist University, Dallas. To verify her answer, the US Bureau wrote a UNIVAC 1101 program. She was also a writer.
She was performing at a local university when someone tried to ask her a tough question with a prepared answer. She answered in seconds when asked. The questionnaire stated that her answer was incorrect and revealed his lengthy calculations. She immediately spotted the calculation error and offered the proper solution.

The secret of Srinivasa Ramanujan's math ability? What was Albert Einstein's secret to scientific breakthroughs? Wolfgang Mozart learned all the notes on his father's piano at 2, performed at 3, and became a brilliant composer at 5. What was the secret? Shakespeare's immortal creations' secret? What allowed John Milton to compose so many masterpieces and recite all 12000 lines of "Paradise Lost" and paradise regained to his daughter Deborah from where he left the previous day without missing a detail, even though he was blind? What made TB Macaulay's memory so good that he only had to read once to remember everything? Many persons with extraordinary abilities?
By researching complex problems, the Department of Computational Intelligence will address the question of whether humans are smarter than computers. In the era of high-stakes AI, it experiments with students, research scholars, faculty, and international and national collaborations on AI, GENAI, DIGITAL Twin, Zero Trust Models, NLP, AI/ML/DL, Supervised/Unsupervised/ Federated Learning concepts.
I Assure Colossal will really catch you up your attention! Stay Tuned for the hidden notes of Music!!

"Every Strike Brings me to the next closer run." -Proverb

B.Amutha
SCO-Newsletter Head

COLOSSAL

Inside the Issue

Asteroid Mining: The Next Frontier for Resources?

Asteroid mining is quickly gaining attention as a potentially lucrative and sustainable solution for addressing Earth's dwindling natural resources. This innovative approach involves extracting valuable minerals and metals, such as platinum, water, and rare earth elements, from near-Earth objects (NEOs).

As our planet faces increasing demands for precious materials necessary for electronics, energy storage, and aerospace industries, the finite nature of terrestrial resources prompts a look towards the vast wealth floating in space.

Asteroids, remnants from the early solar system, are believed to hold not only base metals like iron and nickel but also precious metals and compounds that could support space exploration and habitation.

Leading space agencies and private companies are already laying the groundwork for such ventures. Technologies for prospecting, landing on, and mining these celestial bodies are in various stages of development.

So, how Asteroid Mining actually works?

The economic implications are vast, with the potential to dramatically reduce the scarcity of critical resources and lower the environmental impact of mining on Earth. However, legal and ethical questions about space resource rights and the environmental consequences of extraterrestrial mining remain unresolved.

As this exciting field evolves, it promises not only to revolutionize resource consumption but also to propel humanity further into the cosmos, potentially making space a new arena for human activity and industry.

"Asteroid mining isn't just about harvesting resources from space; it's about expanding the frontiers of human capability and ensuring the sustainability of our species across the cosmos."

STUDENT ACHIEVEMENTS

Samudra Banerjee

Samudra Banerjee, a standout talent at Cintel, has landed internships at SETV Global and was promoted to Founders Office and NASA. His work at SETV Global involves pioneering technology projects, driving innovation in the tech sphere. The highlight of his career is his current role at NASA'S IMPACT team working at IEEE GRSS, where he contributes to groundbreaking space exploration initiatives. Samudra's journey is a testament to where ambition and talent can lead. An inspiration to peers, he embodies the potential to influence significant advancements in technology and space research, marking him as a notable figure in the scientific community.

Swetanshu Agrawal

Swetanshu Agrawal has demonstrably cultivated valuable practical experience during his tenure at CINTEL. He is currently engaged in an enriching internship program, concurrently gaining exposure at esteemed organizations like SETV Global, DRDO, and Infosys. This multi-faceted approach equips him with a well-rounded perspective and transferable skills that will undoubtedly benefit CINTEL. Swetanshu's diverse internship experiences highlight his proactive approach to professional growth and his potential to become a valuable asset within CINTEL

ASTIVA VEER GARG

Astitva Veer Garg, a distinguished member of the CINTEL department, is currently leveraging his expertise through an internship at Samsung Magpie 24, DRDO. This prestigious opportunity allows him to demonstrably apply his knowledge and gain invaluable experience within a renowned organization. These experiences will undoubtedly provide him with invaluable skills and knowledge that will benefit him throughout his career. This blend of industry experience and academic grounding positions him for future success in the field.

STUDENT ACHIEVEMENTS


Aayushman Ghatak

Aayushman Ghatak, a distinguished student of the CINTEL Department at SRM, is currently enriching his skills through an internship at SETV Global as an AI/ML Engineer. In his tenure at CINTEL, Aayushman has notably advanced AI-driven analytics, enhancing predictive models that significantly improved decision-making processes. His development of a machine learning framework has also streamlined data integration, showcasing his capability to innovate and drive impactful technological solutions.

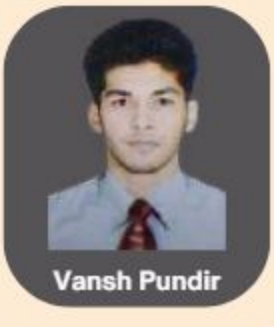
Bidipta Biswas, currently an intern at SETV Global as an AI/ML Engineer, has demonstrated commendable performance in the CINTEL department. Her contributions include the successful implementation of innovative communication protocols and the optimization of machine learning algorithms, which have significantly enhanced operational efficiency. Her technical acumen and proactive approach have been instrumental in advancing CINTEL's technological initiatives.


Bidipta Biswas


Nitanshi Bhardwaj

Ms.Nitanshi Bhardwaj has got selected for an Internship opportunity at IIT Kanpur under the guidance of Prof.K.M Sharika in the field of Cognitive Science

Mr. VANSH PUNDIR has got selected for an Internship opportunity at IIT Kanpur in the field of “Computer Vision “ under the guidance of Prof.Tushar Sandhanam, Computer Vision Lab.


Vansh Pundir

STUDENT ACHIEVEMENTS

In a display of exceptional talent and teamwork, CINTEL department students and their team made history at Codefest 2024 by securing both first and second place.

This remarkable achievement is a testament to the collaborative efforts and innovative spirit of our department, showcasing our commitment to excellence in the field of technology.

Saketa Sri Ramacharyulu Gudimella, Kushagra Purohit team ByteTribe has secured the second place at the National Level Hackathon hosted by MIT. Their innovative app, designed to assist individuals with speech impediments, promises to revolutionize communication and therapy.

STUDENT ACHIEVEMENTS

Mr. Ashish Kumar Srivastava, Mr. Johan Mathew Joseph , Ms. Ananya Kinha , and Mr. Yashwardhan Khanna are the third-year AIML students.has secured the First place in Barclays Chennai hackathon,

Team Comprises of Hariharan Mudaliar, Omkar Chowdary, Murali Sai Valiboyina, and Abhiramsai mamidala. Has won First Prize at the SRM Hackathon 8.0 held on April 8th and 9th, 2024 for their Project work titled "Medilingual: CNN and Transformer powered Localized Medical Assistant" from the Department of Computational Intelligence, School of Computing

Harinarayanan R, Aswin Sujith Varghese, and their team guided by Dr.Om Prakash has won the winning the SDG internal Hackathon 2023 held at SRM. Their innovative solutions are paving the way towards a sustainable future.

STUDENT ACHIEVEMENTS

- Balaji Sasank Chaganti (RA2211026010461) has taught approximately 150 students over his four years in B.Tech. He led "Create and manage resources" workshops using Qwiklabs and GCP at the Qwiklabs Developers Club's Sky High event.

- Aryan Sharma attended the 42nd Cado-Fest at D.G. Vaishnav College from March 13th to 15th, 2017.

- Aryan Agrwal (RA2211026010450), Siddhant Sharma (RA2211026010408), and Akshat Singh (RA2211026010447), has participated in the CAD 2.0 hackathon and, with the "Cleaner Unkle" project they created, placed tenth out of one hundred teams and were awarded certificates of participation.

- KIRUSHAKKARASU KT, SANJAY PONNAMBALAM N, under the guidance of Mentor Dr. Prithi Samuel, were awarded the silver medal at the SRMIST Research Day on March 4, 2024.

- TUMATI OMKAR , MUDALIAR HARIHARAN GANESHAN, CHOWDARY of second year AIML was awarded second place at the Project Expo for their "Rollie – Generative AI Powered Home" project.

- RA2111026010073-Pratham Agarwal,RA2111026010125-CH MALVIKA REDDY,RA2111026010105-ANKIT SINGH of third year has participated Research Day Presentation.

- Ankit Singh (RA2111026010105) and CH MALVIKA REDDY (RA2111026010125) has secured an Internship offer with Philips through Philips Ideathon event.

STUDENT ACHIEVEMENTS

- Shivansh Trivedi (RA2211026010453), Balaji Sasank Chaganti (RA2211026010461), and Vallu Sai Gopal (RA2211026010506) has demonstrated their project work titled, "Active Crash Detection and Alarming System" and was awarded with a special recognition by IIEC.

- Rasha Vihasini M (RA2211026010419), Anushtika S.U (RA2211026010400), Surya KP (RA2211026010378), Vivish Adhik (RA2211026010430), Rajvi Deeraj R (RA2211026010375), and Kavin Bharathi (RA2211026010380) has presented their project work titled "The Neonatal wristband" at SRMIST Project Expo 24, and garnered special recognition from SIIEC.

- Sanskar Diwedi, Balaji Sasank Chaganti, Vallu Sai Gopal, RA2311030010287 has qualified for the National Hackathon Championship round by clearing the prelims using their work titled "DeepFake Detection".. Also, they secured 10th place out of 1500 teams.

- RA2311047010196-Mathangi Diwakar has participated in the IEEE-hosted Hatrix which held during March 4th to April 5th, 2024.

- Lipika Soni, Adrika Kakoty,Anish Kumar, Ayush Bhatnagar,Aaditya Baruah, Dhruv Santosh has Secured Third place in Standard Chartered Mini hackathon.

- R Krish Katyal has bagged the First Place at the CINTEL Project Expo for his Project work titled "Health Co-Pilot".

- RA2311047010192-Muhammed Afzal A did not attend the event despite being a Dbuglabs (SRM) center. .

SPACE SOLAR POWER

"Solar power is not just about generating electricity; it's about empowering generations to come with clean, sustainable energy from the sun."

Space Solar Power (SSP) represents a transformative approach to sustainable energy. This innovative concept involves collecting solar energy in space, where it is abundant and uninterrupted by Earth's atmosphere or day-night cycle, and then transmitting this power back to Earth as microwave or laser energy. These beams are then received by ground stations, converted back to electricity, and fed into the power grid.

The advantages of SSP over traditional solar power are considerable. Space-based solar panels can capture sunlight at all times, unaffected by weather or geographical constraints, potentially offering a constant and immense supply of energy. This could significantly enhance the reliability and capacity of renewable energy sources, helping to meet growing global energy demands while reducing reliance on fossil fuels and decreasing greenhouse gas emissions.

Several countries and private enterprises are exploring the feasibility of SSP. Projects and studies are underway to address the technical challenges such as the efficient conversion of solar energy into transmittable formats, safe and precise energy transmission to Earth.

"Solar power is not just about generating electricity; it's about empowering generations to come with clean, sustainable energy from the sun."

Moreover, the development of SSP could drive advancements in space technology and infrastructure, supporting broader goals in space exploration and permanent off-world settlements. Despite the high initial costs and technological hurdles, the potential long-term benefits of a virtually inexhaustible and clean energy source make SSP an exciting field in both aerospace and energy sectors.

Nuclear Thermal Propulsion: Taking Humans Farther, Faster

As humanity sets its sights on exploring more distant celestial bodies, such as Mars and beyond, the limitations of traditional chemical rockets become increasingly apparent. Enter nuclear thermal propulsion (NTP), a technology that could revolutionize space travel by providing higher efficiency and shorter travel times.

Nuclear thermal propulsion utilizes a nuclear reactor to heat a propellant, like hydrogen, to extremely high temperatures before expelling it through a rocket nozzle to produce thrust. Unlike chemical rockets, which burn fuel to create thrust, NTP relies on the reactor's heat, offering a more efficient and powerful means of propulsion.

Operating a nuclear reactor in space introduces radiation risks to both crew and electronic equipment, necessitating robust shielding and safety measures as key components of Nuclear Thermal Propulsion (NTP) design. The technological challenge of developing a lightweight, reliable, and controllable space-ready reactor is substantial .

The Intersection of Modernism and Timeless Elegance

Additionally, launching nuclear materials into space involves significant regulatory and political hurdles, requiring stringent compliance and international cooperation due to the potential risks associated with accidents.

Several space agencies, including NASA, are actively researching and developing NTP technology. NASA's recent developments include partnerships with private companies to design and possibly test NTP systems in the coming decades.

The potential for NTP to be a game-changer in space exploration is vast, with ongoing projects aimed at addressing the technical and safety challenges.

Faculty Achievement

DR.ANITHA D

Dr. Anitha D was honored with the J C Bose Award 2024 for Outstanding Academicians. This prestigious recognition highlights the exceptional caliber of our department's esteemed faculty. It underscores our commitment to excellence and the impactful contributions of our academic community.

DR.DGP KANDASAMY

A diverse research team analyzed data from 108 ambulance call centers across Tamil Nadu to study the impact of pandemic waves and the post-pandemic phase on maternal healthcare and the research was shown in the Hindu paper.

DR.VIMALADEVI

Dr. V. Maladevi, who holds a role in technology, has recently expanded her professional qualifications by completing the Certified Application Development certification offered by ServiceNow.

Faculty Achievement

DR. T.S. SHINY ANGEL

Received the Zscaler Cybersecurity Fundamentals Associate Course certificate and completed AICTE's 10-week virtual internship on "Zero Trust Cloud Security."

DR. ATHIRA M. NAMBIAR & DR.K.SURESH

Dr. Athira M. Nambiar served as a reviewer for ACM Computing Surveys and ICONDEEPCOM-2023.

Dr. K. Suresh served as a member of the Doctoral Committee at Anna University, Chennai.

DR. S. KRISHNAVENI

Dr. S. Krishnaveni received the "Artificial Intelligence Medical and Engineering Researchers Society" (AIMERS) Best Faculty Award. She was recognized as a Veteran Innovator in Academic Collaboration and has completed a post-doctoral fellowship at City University of London through the Faculty Abroad Program. Additionally, she has served as a visiting researcher at both City and Manchester Metropolitan Universities in the UK.

DR. S. AMUDHA

Dr. S. Amudha was promoted to Associate Professor and served as a resource person for a session on "AI and ML Basics" in the Department of Electronics and Instrumentation at SRMIST. Additionally, she was a reviewer for the ICDCOT-2024 conference held on March 15-16, 2024, at SJB Institute of Technology, Bangalore.

DR.B.HARIHARAN

Dr. B. Hariharan was appointed as a Board of Studies (BOS) Member at Sri Krishna College of Technology in Coimbatore on February 2, 2024. He served as a resource person at a national cloud security symposium in New Delhi on October 6, 2023, a Faculty Development Program on Blockchain Technology in Medical IoT on December 15, 2023, and an AI Workshop at SRMIST, Vadapalani, on February 22, 2024.

Faculty Achievement

DR. M. DHILSATH FATHIMA

She secured a gold medal for my paper presentation at the Research Day event held on March 4, 2024, at SRM Institute of Science and Technology.

DR.SUDHA RAJESH

In 2024, Sudha Rajesh served as a Session Chair for the International Conference on Computational Communication and Informatics, which was organized by Sri Shakthi Institute of Engineering and Technology in Coimbatore from January 29th to 31st. Additionally, she cleared a GL-sponsored "Marketing Analytics" MOOC, completed an Udemy-sponsored "Object-Oriented Programming in C++" MOOC, and finished the "Google Analytics" MOOC offered by Smili Learn - Skillup.

R.GOPIRAJAN PV

Acted as a resource person for the Faculty Development Program (FDP) on Machine Learning for Medical Image Processing, organized by the Department of Electronics and Instrumentation at SRMIST, KTR, on February 8, 2024.

DR. MOHANDAS

He received a certificate of appreciation for motivating his final year project team students to participate in Project Expo 24, organized by the SRM School of Computing Sciences. Their team project, "EMOASSIST: AI Enhanced Therapeutic Model," won third prize on February 15 and 16, 2024, at SRM IST Kattankulathur, Chennai.

DR.R. BABU

In 2024, Dr. R. Babu presided over a session at the International Conference on Computational Communication and Informatics, which was hosted by Sri Shakthi Institute of Engineering and Technology in Coimbatore from January 29th to January 31st.

WORKSHOPS

72 Hrs hackathon - DIGITHONE 1.0

The Cintel Students Association hosted a 72 Hrs hackathon - DIGITHONE 1.0 in association with HCL and Code Ninja.The event was graced by eminent judges from HCL, Peza , Code Ninja and many startup's.

"Photo contest" - CINTEL IEI

The IEI student chapter from the Department of CINTEL organized an event called "Photo contest" with themes that allowed the students to explore and give an extraordinary view on the elegance of SRM Institute of Science and Technology.

Optimization techniques for Real time applications in AI using cloud services

The Department of Computational Intelligence held a three-day workshop on "Optimization techniques for Real-time AI applications using cloud services" from 07-02-204 to 09-02-2024. Mr. Prabhu Sundaram, Associate Manager, DXC Technologies, led Session 1 on "Google Cloud Projects: Basic Machine Learning Models with Vertex AI Notebook," followed by Mr. Nivash, Lead Data Engineer, LTI Mindtree handled the session on "Google Cloud Projects : Vertex AI".

Pentathon

On February 14th, 2024, Cintel NextGen AI hosted the 'Pentathon' event, a celebration of innovation and recognition. Distinguished guests Mr. Ajay Prabhu and Mr. Chandrajeet Kanchan, along with Dr. Annie Uthra, Head of the Department of Computational Intelligence, and Mrs. Anupama, Assistant Director of International Relations, welcomed attendees. The event featured insights from leaders in various fields, inspiring a spirit of excellence among all present.

Earth Science with AI

The Department of Computational Intelligence is hosting a six-day workshop from April 3-9, 2024, on technology interchange and development in earth science using Artificial Intelligence. The workshop will explore AI applications in Earth System changes, featuring eminent experts from IMD, academia, and industry. It offers a valuable opportunity for students and researchers to learn about current environmental challenges and AI solutions.

Cubesats, the small satellite revolution, are reshaping the landscape of space exploration and research. Originating as educational tools, these miniature satellites have rapidly evolved into vital assets for scientific, commercial, and governmental missions. Typically weighing just a few kilograms and having a volume of mere liters, cubesats are a testament to how miniaturization and technology can work hand in hand.

The concept of cubesats began in 1999 as a collaborative project between California Polytechnic State University (Cal Poly) and Stanford University. The idea was simple: create a standard, small satellite that could be built using off-the-shelf electronics to reduce costs and development times.

CUBESATS: PIONEERING THE FUTURE OF SPACE RESEARCH AND EXPLORATION

Graphics Director
Colossal

HERE'S THE FASCINATING TRICK:

Cubesats, the tiny titans of space technology, epitomize ingenuity, packing remarkable capabilities into their standardized 10 cm cube frames. These mini-satellites utilize modular design for customizable and upgradable components like power systems and scientific instruments. Deployed via devices such as P-PODs, they make use of commercial off-the-shelf components for cost-efficiency and rapid development. Despite their small size, they manage significant challenges such as limited power from compact solar panels and stringent communication limitations due to small antennas. Innovations in thermal management, miniaturized propulsion, and advanced onboard computing enable these micro-machines to execute complex, autonomous tasks efficiently. Integrated end-of-life de-orbit strategies ensure that cubesats also promote sustainable space exploration, keeping orbits clear of debris.

The versatility of cubesats is evident across a spectrum of applications. In academia, they function as educational tools, while in science, they facilitate studies in atmospheric science, Earth observation, and astrophysics. Commercially, they enable cost-effective Earth imaging and weather forecasting. Cubesats also play a pivotal role in testing new technologies such as ion thrusters and solar sails, paving the way for more advanced space missions. Their low cost and brief development cycles further fuel innovation and risk-taking in technological trials, making them invaluable assets in both research and commercial sectors.

Despite their rise, cubesats face challenges due to their small size, limiting power capacity and onboard systems, which may restrict mission capabilities. Additionally, increasing launches raise concerns over space traffic and debris, necessitating effective management for a sustainable space environment. Nevertheless, the potential of cubesats expands with planned missions for lunar and Mars exploration, and as interplanetary communication networks improve, they could contribute to a solar system-wide information network. Undoubtedly revolutionizing space technology, cubesats have democratized satellite missions, promising a future of cost-effective and innovative space exploration.

COLLABORATION

Department of Computational Intelligence, School of Computing, SRMIST, KTR in association with Sentient Scripts Private Limited has inaugurated “AI Driven Discovery Hub”-An Industry Sponsored Lab at UB803 on 23/02/2024 at 10 am.

The Directors of Sentient Scripts Private Limited Mr. Manjith Sundaresan and Mrs. Priya Mary Jacob has graced the occasion along with Mr. Lakshmi Narasimhan Director - International Relations, Dr. Revathi Venkataraman, Chairperson, School of Computing and Dr.R. ANNIE UTHRA , Professor and Head, Department of Computational Intelligence, School of Computing.

PATENTS & GRANTS

01. Dr.M.Ferni Ukrit

The patent entitled "A Smart Human Gait Recognition System and a Method Thereof" has been awarded to Dr. M. Ferni Ukrit

02. Dr.C.Amuthadevi and Dr.S.Amudha

Grant for the "AI-based Wall Climbing Industrial Robot" for Dr.C.Amuthadevi and Dr.S.Amudha

03. Dr. T.S. Shiny Angel

Patent Grant: A method and system for recommending courses has been granted for Dr. T. S. Shiny Angel

04. Dr. M.S. Abirami

A patent Grant on “Systems and Methods for Evaluating the Performance of a User”, has been granted to Dr. M.S. Abirami

05. Dr. G. Senthil Kumar

Patent Grant to Dr. G. Senthil Kumar for a Course Recommendation System and Method

06. Dr. S. Krishnaveni

IoT-Powered Glove Wearable Device For Individualized Post-Stroke Rehabilitation And Monitoring: A Patent Approved to Dr. S. Krishnaveni

PATENTS & GRANTS

07. M.D. Salomi

M.D. Salomi obtained a patent for an invention titled "A Method And System For Waste Food Management, Retrieval, And Disposal." another patent for the "Electro Spin Basin Cleaner invention. "

08. Dr. B. Haiharan

Patent Grant to Dr. B. Haiharan for a Device to Detect Vehicle Driver Drowsiness

09. Dr. S.Amudha

Dr. S.Amudha "Intruder Detection System In A Smart Building Using A Surveillance Camera Bot" h.

10. Dr. B. Jothi

"An Enhanced Intrusion Detection System For An Internet of Things (IOT) Network And A Method Thereof" was awarded as patent to Dr. B. Jothi.

11. Dr. J. Jeyasudha

The patent for "A Self-Training Virtual Reality (VR) System For Overcoming Acrophobia And A Method Thereof" was granted to Dr. J. Jeyasudha.

12. Dr. M. Maheswari

A patent was granted to Dr. M. Maheswari for "A secure locker system and a method therefor."

PATENTS & GRANTS

13. Dr. S. Prithi

A patent entitled "Real-Time Sentiment Analysis And Trading Strategies On Blockchain" was published by Dr. S. Prithi.

14. Dr.S.P. Angelin Claret

Patent "A Non-Contact Health Monitoring System and A Method Thereof" is granted to Dr.S.P. Angelin Claret

15. Dr. R. Babu

Dr. R. Babu successfully obtained a Certificate of Registration of Design for the "Oxygen Concentrator with Filter." Additionally, Dr. Sheryl Oliver, Dr. Kanipriya M, Dr. R. Babu, and Dr. R. Usharani obtained a Certificate of Registration of Design for the "IoT-Based Height Adjustable Wheelchair." Furthermore, Dr. Sheryl Oliver, Dr. R. Babu, Dr. Kanipriya M, and Dr. K. Babu filed a patent titled "Method Of Predicting Diabetes Using ML."

CONSULTANCY & FUNDED PROJECTS

- Dr.B.Hariharan as CO-PI got joint funding initiative at the University of Technology and Applied Sciences-Ibri, Oman titles “IRFP-IBRI-24-23” aims to revolutionize healthcare in Oman through AI-driven disease prediction and an online consultation system, ensuring enhanced accessibility and timely management for all. Amount sanctioned 500 OMR(Rs 1,07,886).

- Dr.S.Aruna, Dr.B.Jothi, Dr.M.Maheswari, Dr.S.Krishnaveni, Dr.J.Jeyasudha, Dr.A.Saranya has completed a Consultancy titled "Android App Development for Mental Health Monitoring" — This project involved developing an Android app to monitor mental health.

- Dr. S.Amudha has sanctioned a Consultancy Project titled "Deep Learning Approaches for Diagnosing Cancer" — This project focuses on utilizing deep learning techniques to diagnose cancer effectively.

Content Director

Colossal

3D PRINTING IN SPACE:

Building a Future Beyond Earth

3D printing is poised to revolutionize space exploration by enabling on-demand production of tools and structures directly in space. This reduces the need for costly resupply missions from Earth, using materials adapted for extraterrestrial conditions. In microgravity environments like the International Space Station (ISS), astronauts have already demonstrated the ability to print various items, confirming the practicality of this technology.

Beyond tool creation, ambitious projects like the European Space Agency's lunar base concept plan to use 3D printing to build habitats on the Moon using local regolith. This method could similarly be applied to Mars, enhancing our capability for long-term colonization of other celestial bodies.

As this technology advances, it could enable deep space missions to perform complex construction projects on other planets, expanding human presence beyond Earth and laying the groundwork for sustainable extraterrestrial living.

TED Ideas worth spreading

Expanding Horizons

A unanimous passion to be part of the revolution to bring ideas back to the table, ideas that can transform the very mindset of the world.

TEDx SRMKattankulathur

On April 10, 2024, the TEDxSRMIST- Ektara event, held at SRM Institute of Science and Technology, brought together 100 participants for a series of inspiring talks themed around "Ektara," symbolizing unity through diversity. Organized by Dr. B. Hariharan and Ms. C.G. Anupama, the event featured eight distinguished speakers from various fields, each sharing unique insights and life lessons aimed at fostering understanding and communal harmony.

Drawing its inspiration from the simple yet profound musical instrument "Ektara," the event aimed to explore the resonance of diverse viewpoints tied together by the universal thread of humanity. The theme resonated through the lineup of speakers, each of whom brought unique life lessons and insights from their respective fields, encouraging unity and understanding. Speakers included Sagar Makwana, discussing the impact of social conditioning on personal growth; Prachi Goswami, detailing her journey from swimming to aviation; Vishal Yadav, highlighting his initiatives in promoting women's cricket; and Prakruti Mishra, sharing her experiences in regional cinema. Each presentation emphasized resilience, integrity, and the importance of diverse perspectives in driving personal and community development.

The event successfully inspired attendees, equipping them with ideas and motivations to tackle personal and professional challenges. The financial and organizational efforts were well-managed, contributing to the overall success of the event, which celebrated the power of shared ideas and collective wisdom in a resonant day of talks.

Geoscience and Remote Sensing Society and Earth Science Informatics SRM Student Chapter

"UNLOCKING EARTH'S MYSTERIES REMOTELY"

IN DIRECT COLLABORATION WITH THE NASA'S IMPACT TEAM

Earth observations are a key component which facilitates scientific progress. IMPACT prototypes the latest technologies to support new science and applications from Earth observation data.

In conjunction with the pre-conference International Week, we proudly hosted the IEEE GSS (Geoscience and Remote Sensing and Earth Science Informatics) Inauguration and Hackathon from April 23rd to 26th.

Following the workshop, teams engaged in an intense Hackathon Competition from April 24th to 26th. The best student batch, showcasing their prototype models and presentations, was honored with recognition.

Renowned Computer Scientist, Er. Muthukumaran R from NASA, led a dynamic workshop in collaboration with IEEE. Students immersed themselves in hands-on sessions, mastering LLMs and NLP for Data Query Systems, and honing their skills in Visualization Techniques using Remote Sensing Data with Fine-tuning and Interfacing Foundation Models.

TOP PLACEMENTS

Microsoft

JASWANTH

SIMRAN SACHDEVA

Cummins

CH MALVIKA REDDY

SANSKRITI SINGH RAJPUT

IBM

ROHAN BHANDARI

TANDON ANSH PUNEET

pwc Acceleration Center

ASHISH KUMAR SRIVASTAVA

ANANYA KINHA

BISHAL DE

CH MALVIKA REDDY

MOHAMMED JAVIDH S

PRAKHYA PRAGNYA SHRI

DEVANSH AGARWAL

ADITI UPADHYAY

ALEENA SARA MATHEWS

MANE SOURAV SANJAY

TIYYAGURA VAMSI KRISHNA REDDY

YANDAPALLI HARSHAVARDHAN REDDY

SIEMENS Internship.

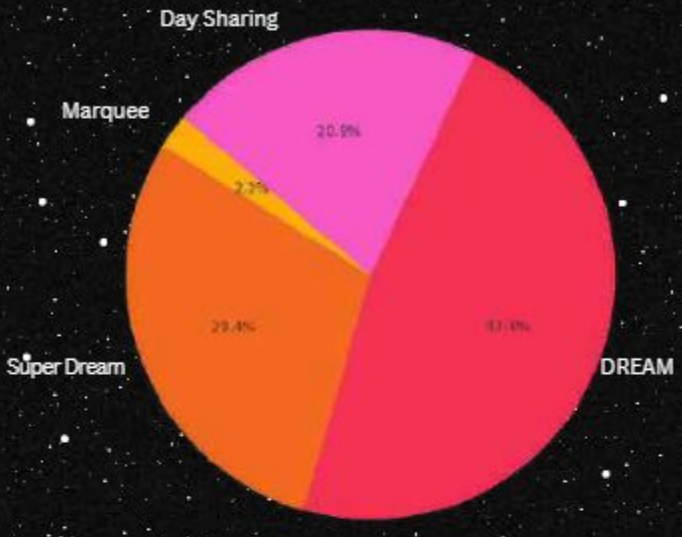
PRATHAM AGARWALLA

SAMARTH KUMAR BHARDWAJ

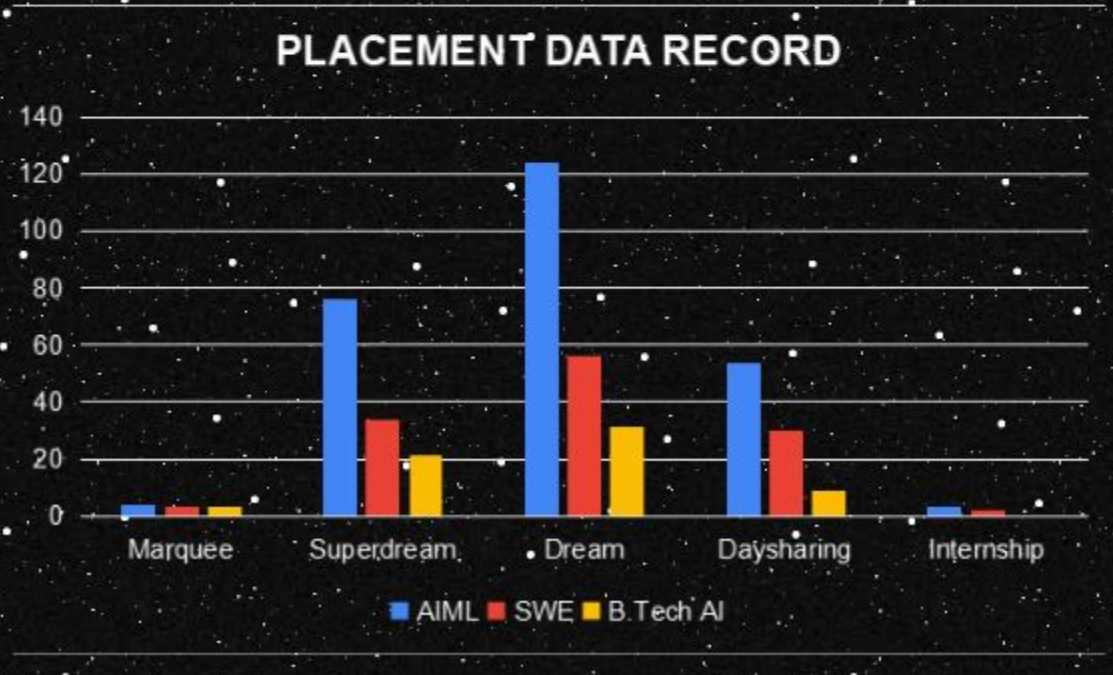
JALADANKI ARUN KUMAR

SAI RISHYANTH VISINIGIRI

TOP PLACEMENTS



The highest salary package stands at 40 LPA offered by Fact-wise, showcasing the lucrative opportunities available for top performers. The entry-level salary, provided by TCS NINJA, is a solid 3.6 LPA, ensuring a good start for new entrants. The ongoing placements have an average salary of 9.25 LPA, indicating a well-balanced compensation landscape. These figures represent a strong foundation for both high achievers and newcomers, emphasizing SRM's commitment to fostering growth and opportunity within its dynamic placement program.



International Conference

The Third International Conference on Deep Sciences for Computing and Communications (IconDeepCom 2024), held from April 22nd to 26th, 2024, in Dr. T.P. Ganesan Auditorium, brought together eminent figures like Dr. Usha Dixit Scientist F, DST; Dr. Balasubramaniyan Sankaranarayanan CEO Thryve Digital.

Dr. Vaibhav Gupta Sr Technical Officer, IRDE, DRDO and Shri JP Singh Scientist G, IRDE, DRDO . The conference featured 176 peer-reviewed papers presented over several technical tracks, focusing on cutting-edge developments in computing and communications.

International Conference

The keynote speaker for the first track was Dr. Po-Ming Lee, Prof., Department of Electronics Engineering, Southern Taiwan University of Technology, Taiwan, who spoke on "AI Server Environment. The track 1 was under the category of Artificial Intelligence and its Diverse Applications.

In the second track, "Future Trends in Health Care," IProf. Gang Li presented an interesting talk on "Recent Trends and Future Directions in Machine Learning."
Prof. Viraj, Professor, Kotak-IISc AI-ML, Centre Indian Institute of Science, Bengaluru, presented an engaging keynote talk on "GEN AI-ASSISTED MUKTIDISCIPLINARY RESEARCH" in track -3.

In Track-4, titled "Exploring AI Insights," Dr. Deepak Mishra from the Department of Avionics at the Indian Institute of Space Science and Technology, Trivandrum, delivered an insightful keynote on "Generative Artificial Intelligence Applications: A Comprehensive Overview." This session featured the presentation of eight papers, each contributing to the broader understanding of generative AI technologies.

In Track-3, focusing on Language Models and Deep Neural Networks, Professor Viraj from the Kotak-IISc AI-ML Centre at the Indian Institute of Science, Bengaluru, delivered a compelling keynote presentation titled "Gen AI-Assisted Multidisciplinary Research." During this session, a total of 10 papers were presented, each exploring various facets of AI applications in multidisciplinary research.

IconDeepCom 2024 not only fostered a rich exchange of knowledge and ideas but also provided a platform for upcoming scholars and seasoned professionals to interact and collaborate. The event underscored the importance of interdisciplinary approaches and the growing impact of AI and deep learning across various sectors. With rigorous discussions, networking opportunities, and innovative competitions, IconDeepCom 2024 proved to be a crucible of scientific advancement and technological innovation.

INTERNATIONAL WEEK

Power outages and variations threaten AI server availability and data integrity. UPS and multiple power supply ensure uninterrupted operation and data security to mitigate these hazards. AI servers can run Linux or Windows, with Kali Linux preferred for security testing. To avoid overheating and optimize performance, servers need cooling. Server temperature is managed by air conditioning, liquid cooling, and server room ventilation. Proper cooling infrastructure supports AI workloads and data processing by extending AI server hardware lifespan.

Server placement Traditionally used for visuals, GPUs now enable AI through parallel computing. They transform scientific research and data analytics by speeding up deep learning jobs in TensorFlow and PyTorch. AI servers with powerful GPUs or TPUs enable large-scale model training and real-time inference. These servers' firewalls safeguard data from internal and external attacks. AI servers advance natural language processing, computer vision, and autonomous systems by using GPU parallelism. A few Linux commands were learned.

Prof. Gang Li, Professor, School of Info Technology, Deakin University, Australia Handled Special session on "Theoretical Machine Learning (TML)" which emphasizes theory of computation and statistics to capture the key aspects of machine learning. He covers the basics of machine learning, finite hypothesis classes, PAC, Agnostic PAC Learnability, Radon's Lemma, Sauer's Lemma, and Non Uniform Learnability. The knowledge acquired as a part of TML is a crucial set of abilities for project development.

FACULTY UPSKILLING

- **Dr.Ferni Ukrit, Dr.M.S.Abirami, Dr.B.Jothi, Dr. J.Jeyasudha, Dr.Sridevi Ponmalar, Dr.B.Pitchai Manickam, Dr.S.P. Angelin Claret, Dr.Antony Sophia N, Dr. Pritam Khan** attended One Week FDP on "***Artificial Intelligence in Data Science and its Applications in IoT***", SRMIST, Kattankulathur-27.11.2023 to 02.12.2023.
- **Dr.C.Amuthadevi** attended One week National level FDP on "***Cloud Infrastrucure(AWS)***", from 21 - 25 August 23.
- **Dr. A.Alice Nithya** attended Special Interest Group in "***Artificial Intelligence for Business Research Symposium***" co-hosted by the School of Business, UniSQ, and the School of Computing, SRM Institute of Science and Technology, India, was successfully conducted at the UniSQ Springfield campus and online on 23 November, 2023.
- **Dr. S.Amudha, Dr.Antony Sophia N** attended one week FDP on "***DATA ANALYTICS - UNLEASHING THE POWER BI***" held from 16.10.2023 to 20.10.2023 organized by Department of Computer Science &Engineering, K S R Institute for Engineering and Technology, Tiruchengode, Tamilnadu.
- **Dr. M.Salomi** attended Faculty Development Programme (FDP) on "***AI Enabled AR/VR in Communications & Signal Processing Application***", during 3rd– 7th October 2023, organized by Department of Electronics and Communication Engineering, Nalla Narasimha Reddy Education Society's Group of Institutions – Integrated Campus.
- **Dr.Kanipriya .M** completed "***UHV -2 online***" FDP conducted from 16th Oct to 21st Oct 2023. And also, she participated in FDP titled "***Linux Applications in Engineering Education",*** conducted by NITTTR.
- **Dr.S.P. Angelin Claret, Dr.Antony Sophia N** Completed ATAL FDP on 04/12/2023 to 09/12/2023 at VEL TECH Rangarajan Dr.Sagunthala R and D Institute of Science and Technology, Chennai.

Ram Navmi

Lord Rama, a Vishnu incarnation, is honored on Ram Navami. It falls on the ninth day of Chaitra's bright fortnight, March or April in the Gregorian calendar.
The Ramayana hero Lord Rama is revered for his virtue and justice. His life and actions are dharma models. Ayodhya is where Hindus believe Rama was born and king. Ram Rajya is shown as just and wealthy.

Indian areas celebrate Ram Navami differently. People fast and perform bhajans or kirtans in numerous places. Temples are decorated and ritualized. Many followers recite Ramayana passages and enact Ramlila, Rama's dramatic acts.

Ayodhya, Rama's birthplace, presents a grand celebration that draws Indian pilgrims. Culture and religion are celebrated with spiritual processions and large gatherings.

Deity birth and moral regeneration on Ram Navami encourage morality and fairness in personal and social existence.

PUBLICATIONS

- **Dr.M.Uma** et al., published a paper on "Machine learning enabled robot-assisted virtual health monitoring system design and development" in Multiscale and Multidisciplinary Modelling, Experiments and Design. In the International Journal on Interactive Design and Manufacturing, she also published a paper entitled "Development of Rapidly Exploring Random Tree-based Autonomous Mobile Robot Navigation and Velocity Predictions Using K-Nearest Neighbors with Fuzzy Logic Analysis."Lastly, she published in the International Journal of Intelligent Robotics and Applications, "Optimizing IRB1410 Industrial Robot Painting Processes through Taguchi Method and Fuzzy Logic Integration with Machine Learning."

- **Dr.Akshay J** et al., Published a paper titled “Future Technologies for Industry 5.0 and Society 5.0”, in Automated Secure Computing for Next-Generation Systems.

- **Dr.B.Jothi** et al., Published a paper titled “Internet Fact-Checking using RTSVU (Rating Trust Score by Verified Users)”, in the 5th IEEE International Conference on Cybernetics, Cognition and Machine Learning Applications ICCCMLA 2023.

- **Dr.G.Senthil Kumar** et al., Published papers on, “Machine learning based automatic text summarization techniques”, in SN computer science, Springer, “Music recommendation system using facial emotions”, in Advances in science and technology, also “CNN based covid 19 severity detection and its diagnosis”, in Advances in science and technology.

- **Dr.M.S.Abirami** et al., Published a paper titled “MFO-TL: modified firefly optimal transfer learning based motion correction of fetal brain and placenta MRI for thyroid prediction”, in Evolving Systems,

- **Dr.E.Poongothai** et al., Published “An Empirical Evaluation of Machine Learning Techniques for Crop Prediction”, in the International Journal of Interactive Multimedia and Artificial Intelligence (IJIMAI).

- **Dr. Kaavya Kanagara**j et al., published a paper on "A Dynamic Anomaly Detection Approach for Fault Detection on Fire Alarm Systems Based on Fuzzy PSO CNN Approach" at IEEE Sustainable Communication Networks and Applications Conference. Additionally, she has contributed to the International Journal of Ad Hoc and Ubiquitous Computing with a paper titled "Adolescent identity search algorithm with optimized video-based activity classification using hierarchical auto-associative polynomial convolutional neural network" and "An Improved Convolutional Neural Network-based Approach for Analyzing the ChatGPT and Different Fields Impact."

PUBLICATIONS

- **Dr A.R Arunarani** et al., Published a paper titled "A study on AI and blockchain-powered smart parking models for urban mobility", in Handbook of Research on AI and ML for Intelligent Machines and Systems IGI Global.

- **Dr C. Lalshmi** et al., Published a paper titled "Optimized Intelligent Strategy for user authorization by Facial Recognition", in Multimedia Tools and Applications - Springer.

- **Dr. S. Selvakumara Samy** et al., Published a paper titled "Serverless Computing To Predict Cold Start In Azure And Monitoring I/O Read And Write Using Machine Learning", in the 2023 9th International Conference on Smart Structures and Systems (ICSSS).

- **Dr. M. Maheswari** et al., Published papers titled "Efficient octagonal compression of multimedia data using using LZW-OMCA compressor for secured data transmission", in the Journal of Intelligent and Fuzzy Systems, and a paper titled "Efficient Bloom Filter-Based Routing Protocol for Scalable Mobile Networks", in Engineering Proceedings.

- **Dr. Revathi A.** et al., Published a paper titled "Correlation between Vaccination and Child Mortality Rate Using Multivariate Linear Regression Model", in the Journal of Information and Knowledge Management.

- **Dr. Dhilsath Fathima M** et al., Published a paper titled "Sign Language Interpreter Using Stacked LSTM-GRU", in Lecture Notes in Networks and Systems.

- **Dr. T. R Saravaran** et al., Published a paper titled "Unleashing the Potential of IOT in Tackling Ocean Pollution: A data- Driven Approach for Marine Ecosystem Conservation", in the International Conference on Smart Technologies For Smart Nation (SmartTechCon).

- **Dr. Kiruthika M** et al., Published papers titled "Human Activity Recognition in Video Surveillance Using Long-Term Recurrent Convolutional Network", in 2023 International Conference on Sustainable Communication Networks and Application (ICSCNA) and a paper titled "Comparative Analysis of Diverse Classification Algorithms of Machine Learning by Using Various Quality Metrics", in 2023 IEEE 5th International Conference on Cybernetics, Cognition and Machine Learning Applications (ICCCMLA).

PUBLICATIONS

- **Dr. Akshya. J** et al., Published paper titled “Optimizing Real-Time Path Planning for NPC Navigation: Leveraging CentA* Algorithm to Enhance Efficiency and Adaptability”, in 2023 First International Conference on Advances in Electrical, Electronics and Computational Intelligence (ICAEECI).

- **Dr. A. Sheryl Oliver** et al., Published paper titled “Optical bio sensor based cancer cell detection using optimized machine learning model with quantum computing”, in Optical and Quantum Electronics.

- **Dr. T.R Saravaran** et al., Published paper titled “Unleashing the Potential of IOT in Tackling Ocean Pollution: A data- Driven Approach for Marine Ecosystem Conservation”, in International Conference on Smart Technologies For Smart Nation (SmartTechCon).

- **Dr. S Prithi, Dr. Kiruthika M** et al., Published paper titled “Drowsiness Detection Using Convolutional Neural Networks”, in IEEE Explore.

- **Yuvaraj. R, Dr. Velliangiri S** et al., Published paper titled “Modified hunter prey optimization to enable secure communication for UAV”, in International Journal of Information Technology (Singapore).

- **Dr.Sherin Shibi** et al., Published paper titled “An effective transfer learning model for multiclass brain tumor classification using MRI images”, in AIP Conference Proceedings.

- **Dr. Kaavya Kanagaraj** et al., Published paper titled “Improved Convolutional Neural Network based Approach for Analyzing the ChatGPT and Different Fields Impact”, in 2023 2nd International Conference on Automation, Computing and Renewable Systems (ICACRS).

- **Dr. U. Sakthi** et al., Published paper titled “Deep Convolutional Neural Network Framework for Brain Tumor Classification using MRI Images”, in Second International Conference on Automation, Computing and Renewable Systems (ICACRS-2023).

- **Dr. Velliangiri S** et al., Published paper titled “Binarized Spiking Neural Network with blockchain based intrusion detection framework for enhancing privacy and security in cloud computing environment”, in Applied Soft Computing. Another paper was Published titled “A Novel Split Learning based Consumer Electronics Network Traffic Anomaly Detection Framework for Smart City Environment”, in IEEE Transactions on Consumer Electronics.

PUBLICATIONS

- **Dr. S. Vimal** et al., Published a paper titled “Alzheimer`s disease detection using residual neural network with LSTM hybrid Deep learning models”, in Journal of Intelligent & Fuzzy Systems.

- **Dr. R. Athilakshmi** et al., Published a paper titled “Enhancing Diabetic Retinopathy Diagnosis with InceptionV4:A Deep Learning Approach”, at an IEEE Conference.

- **Kavitha, Dr R. Siva, and Dr K Suresh** Published a paper titled “ESOA: Classification of Autism Spectrum Disorder based on Gaze Tracking Imaging using Egret Swarm Optimization Algorithm”, in IEEE Conference.

- **Dr. G. Tamilmani** et al., Published a paper titled “Medical Image Segmentation Using Grey Wolf Based U-net with Bi-Directional Convolutional LSTM”, in the International Journal of Pattern Recognition and Artificial Intelligence.

- **Dr. M. Salomi Samsudeen** et al., Published a paper titled “Cybersecurity Warning System Using Diluted Convolutional Neural Network Framework for IOT Attack Prevention”, in the International Journal of Intelligent Engineering and Systems.She also published a paper titled “Sky Sweeper: A Drone Surveillance Model Using YOLOV8 and Jetson Nano for Plastic Waste Monitoring System”, in Proceedings of International Conference on Contemporary Computing and Informatics, IC3I 2023.

- **Dr. Moorthi K** et al., Published a paper titled “IoT Enabled Mushroom Farm Automation based on CNN-BiGRU-CRF Method”, at the Seventh International Conference on Electronics, Communication and Aerospace Technology (ICECA 2023).

- **Dr.R.Siva** et al., Published paper titled “ESOA:Classification of Autism Spectrum Disorder based on Gaze Tracking Imaging using Egret Swarm Optimization Algorithm”, in IEEE Xplore and a paper titled “Improving Early Detection of Lung Disorders: A Multi-head Self-Attention CNN-BiLSTM Model”, in Journal of The Institution of Engineers (India): Series B.

- **Dr. Revathi A** et al., Published paper titled “Spelling Correction Using Encoder-Decoder and Damerau-Levenshtein Distance”, in IEEE Xplore.

- **Dr. K Suresh** et al., Published paper titled “A Blockchain-Based Cloud File Storage System Using Fuzzy-Based Hybrid-Flash Butterfly Optimization Approach for Storage Weight Reduction”, in International Journal of Fuzzy Systems.

PUBLICATIONS

- **Dr. Kanipriya M** et al., Published paper titled “An efficient multimodal sentiment analysis in social media using hybrid optimal multi-scale residual attention network”, in Artificial Intelligence Review.

- **Dr. Sivashankar G**. et al., Published papers titled “Automatic Detection of Infection in Diabetic Foot Ulcer Images using Improved-CNN-SVM Approach”, and “Influence of Unbalance on Tyre Pressure Monitoring System based on C-GRU Approach”, in IEEE-International Conference on Electronics, Communication and Aerospace Technology.

- **Dr. Jothi B** et al., Published paper titled “CNN-LSTM Based on Crow Search Optimization Algorithm for Product Review Classification”, in 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques, EASCT 20232023.

- **Dr. T. S. Shiny Angel** et al., Published paper titled “Optimized machine learning model for Alzheimer and epilepsy detection from EEG signals”, in Automata Journal for Control, Measurement, Electronics, Computing and Communications.

- **Dr. Anitha D** et al., Published paper titled “Multi-Objective Remora Optimization Algorithm for Efficient Routing in Cognitive Wireless Sensor Network”,“An Efficient Novel Approach for Iris Recognition and Segmentation Based on the Utilization of Deep Learning” and “Trust-aware Routing Protocol using Modified Sand Cat Swarm Optimization in Iot-Based WSN” in IEEE Xplore.

- **Dr. M. Ferni Ukrit** et al., Published paper titled “Gait Silhouette Enhancement with Modified CLAHE and Precise Gait Recognition Using a Lightweight Convolutional Neural Network”, in the International Journal of Intelligent Systems and Applications in Engineering.

- **Dr. Kiruthika M** et al., Published a paper titled “Identification of Cyberbullying and Finding Target User's Intention on Public Forums”, in the 2023 6th International Conference on Contemporary Computing and Informatics (IC3I).

- **Dr. Saad Yunus Sait** et al., Published papers titled “AI-based Depression Detection using Profile Information”, and “Touch and Motion Sensor Data Collection on Smart Devices in Constrained and Unconstrained Environments” in IEEE xplore.

- **Dr. Sumathy G** et al., Published paper titled “Gaussian weighting—based random walk segmentation and DCNN method for brain tumor detection and classification”, in Multimedia Tools and Applications.

PUBLICATIONS

- **Dr. S. Prithi** et al., Published a paper titled “Comparative Analysis of Deep Learning Models for Telugu News Text Classification”, in IEEE Xplore.

- **Dr. Babu K** et al., Published papers titled “Evaluation and Management of Diabetic Neuropathy from the Perspective of People with Diabetes”, in Salud, Ciencia y Tecnologia - Serie de Conferencias, “Real-Time Monitoring of Glacial Changes Using Artificial Intelligence”, in IEEE XPLORE, and “Model and Algorithm of Multimodal Transportation in Logistics Transportation Based on Particle Swarm Optimization”, in IEEE XPLORE.

- **Dr. R. Mohandas** et al., Published a paper titled “Detecting the symptoms of COVID-19 during pandemic environment using smart spectacle thermal images and deep capsule networks”, in Multimedia Tools and Applications.

- **Dr. A. Saranya, Dr.S.Aruna,** et al., a Published paper titled “Employing Chest X- Ray Images Image Net Models are Developed to Predict the Spread of the Corona Virus”, in 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques, EASCT 2023.

- **Dr. S. Aruna** et al., Published a paper titled “Optimizing Brain Tumor Segmentation with Advanced Superpixel Techniques in Conjunction with Deep Learning Methods”, in 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques, EASCT 2023.

- **Dr. A. Saranya** et al., Published a paper titled “An Effective Hand Gesture Recognition using Convolutional Neural Network with Long Short-Term Memory”, in 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques, EASCT 2023.

- **Dr. M. S.Abirami** et al., Published paper titled “Intelligent diagnosis of fetal organs abnormal growth in ultrasound images using an ensemble CNN-TLFEM model”, in Multimedia Tools and Applications.

- **Dr Kiruthika M** et al., Published paper titled “Drowsiness Detection Using Convolutional Neural Networks”, in 2023 International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE).

Eid al-Fitr

Eid al-Fitr, the "Festival of Breaking the Fast," commemorates the completion of Ramadan, the holy month of fasting. Muslims worldwide commemorate the end of a month-long dawn-to-sunset fasting, one of Islam's Five Pillars.

Muslims congregate in mosques and fields to pray in congregation to start the day. Salat al-Eid, a prayer after sunrise, is followed by a speech on forgiveness, peace, and community harmony.

Traditional celebrations include a celebratory dinner to break the fast and decorated homes. Region-specific foods and desserts are made. Celebrations can last three days, with joyful social gatherings, festive meals, and collective prayers.

Eid al-Fitr is also a time for charity, Zakat. Muslims should give to the needy to commemorate the holiday. Giving gifts and visiting family are hallmarks of the occasion.

Eid al-Fitr celebrates the conclusion of fasting and reminds Muslims to refresh their religion and purify their behavior, giving the community hope.

Alumni Corner

Software Automation Engineer Intern at Apple, Ireland.

During the initial two years of my college journey, I immersed myself in the world of web development, honing my skills and building projects, but felt a pull towards broader horizons. That's when an opportunity at the university brought me face-to-face with the exciting world of iOS application development. An orientation session hosted by Apple and Infosys was particularly impactful. There, I met Saumya ma'am from Infosys, who clarified my doubts about native application development and cross-platform frameworks. Her insights helped me realise the power of native development in delivering a truly refined user experience.

This marked the start of my iOS application development journey. In this whole journey, CIAD played a vital role, the continuous mentorship sessions from both internal and external resource persons helped gain new insights, which brought my attention towards localisation and testing.

I actively sought out internship opportunities at Apple, and when I had just started exploring the testing domain, I found the posting of the Software Automation Engineer Intern, at Apple's career site. Throughout the interviews, I was able to showcase my knowledge gained at the university, combined with my enthusiasm for automation and desire to contribute to Apple's innovative ecosystem.

I'm thrilled to be joining Apple in Cork for the next six months and dive deeper into the world of software automation. I'm confident that this experience will be invaluable in shaping my future career path.

Warm regards,
Vashist Agarwalla

Alumni Talk

The Alumni Talk on “How to Capitalize on AI and Social Media for Career Advancement” was successful. This session offered insights into using AI technologies to create digital marketing products and applications. Dr. S. Krishnaveni, Dr. B. Jothi, and Dr. B. Pitchaimanickam from CINTEL, SOC, SRMIST coordinated the event, focusing on enhancing AI-driven digital marketing applications.

DevOps was the topic of the Alumni Lecture on Software Engineering in Modern Applications. It illuminated DevOps goals, culture assessment, and application development abilities. The session covered continuous integration, delivery, and system feedback monitoring. Drs. S. Krishnaveni, B. Jothi, and B. Pitchaimanickam from CINTEL, SOC, SRMIST organized it.

Alumni Lecture covered "Mock Interview" event.Students learned how to answer interview questions via this alumni speak and mock interview. Participants received additional materials to improve their programming skills, aptitude, and placement preparedness throughout this session.

MAHAVIR JAYANTI

Mahavir Jayanti is a major Jain festival celebrating the birth of Lord Mahavira, the last Tirthankara, who was born in the 6th century BCE in what is now Bihar, India. Observed in March or April, this day commemorates his life and teachings, which emphasize principles such as non-violence, truth, and detachment.

The festival features grand processions, known as 'Rath Yatra', where images of Mahavira are carried through the streets, accompanied by prayers and hymns. Devotees visit temples to worship and read scriptures, reflecting on Mahavira’s teachings.

Charity plays a crucial role in the celebrations, with followers engaging in acts of generosity towards the less fortunate, embodying the spirit of compassion taught by Mahavira. Some devotees also observe a fast, honoring his ascetic life. Mahavir Jayanti serves as a time for Jains to reaffirm their spiritual and ethical commitments, inspired by their last great teacher's life.

OUTREACH

The Department of Computational Intelligence, School of Computing at SRM Institute of Science and Technology, in association with the Value Education Cell, organized a Universal Human Values (UHV) Outreach program on "Harmony in Life" at Venkatachalapathy Primary school, Thangapapuram, Perumattunallur. Guduvanchery, on 21st March 2024

Testimonials

"Colossal has been a cornerstone of our department, fostering collaboration and innovation. As President, I am excited about the potential of our new members to drive us to greater heights. I am proud to have served as President, and I am confident that the fresh ideas and energy of the newcomers will lead us to success. It has been an honor to lead, and I look forward to our future achievements."

★★★★★

SWETANSHU AGRAWAL

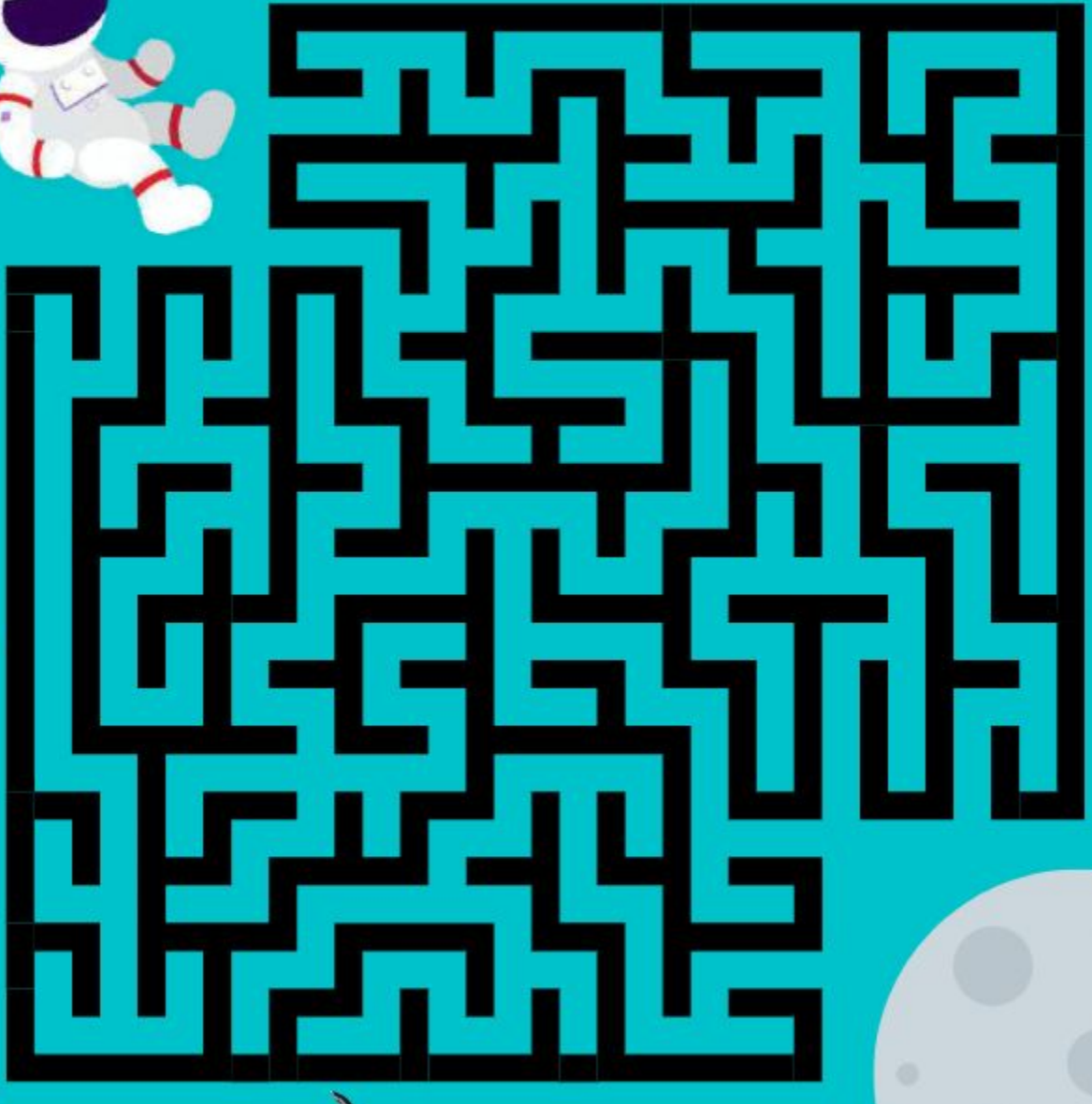
"Colossal has been an departmental institution for a long time; it is not only the face of the department but its a place where like minded people merge to reach greater heights. I have full faith in the team of new commers that are coming into the department and Colossal will take us new found heights and I am proud that I got to serve as its vice president."

★★★★★

SAMUDRA BANERJEE

LOST IN SPACE! MAZE GAME

The poor astronaut is lost in space!
Can you help him get to the moon?



MEET THE TEAM OF COLOSSAL

PRESIDENT

Swetanshu Agrawal

VICE PRESIDENT

Samudra Banerjee

WEB MASTER

Ritveek Rana

Bidipta Biswas
CONTENT DIRECTOR

Aayushman Ghatak
GRAPHICS DIRECTOR

உயர்வகலம் திண்மை அருமைஇந் நான்கின்
அமைவரண் என்றுரைக்கும் நூல்.

Height, breadth, strength, difficult access:
Science declares a fort must these possess.

உயர்வு, அகலம், திடம், அனைத்து தேவைகள
பூர்த்தியாக்கும் அருமை, என நான்கும்
அமையப்படுவதே அரண் என்று
எடுத்துரைக்கும் அரணுக்கான நூல்.

The learned say that a fortress is an enclosure having these four (qualities) viz., height, breadth, strength and inaccessibility.