CINTELASSOCIATION

DEPARTMENT OF CINTEL
Software that can think

School of Computing

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

COLOSSAL

AUG 2024

VOLUME 04
ISSUSE 01

THE DEPARTMENT OF COMPUTATIONAL INTELLIGENCE

NAAC A++

Category 1 with 12B Status

(2022) Ranked 12th University

(2023) World Ranking one among 41 Indian Universities

(2023) World Ranking one among 75 Indian Universities

(2021) Ranked 4th

(2023) World Ranking one among 14 Indian Universities

EDITOR'S VOICE

Dear Orators,

Happy to meet you all in a new excellent occasion at the start of our new academic year 24-25.

As India looks ahead to the Paris 2024 Olympics, the nation's growing emphasis on sports infrastructure, athlete training, and international exposure is more evident than ever. Initiatives led by both the government and private sectors have significantly contributed to the rise of new talents like Manu Bhaker and Jyothika. The focus on nurturing young athletes through grassroots programs and providing them with world-class facilities has started to bear fruit, promising a bright future for Indian sports on the global stage. With the combined efforts of dedicated athletes, supportive institutions, and passionate fans, India is poised to achieve new milestones in its Olympic journey, continuing the legacy of excellence established by previous generations.

India has a rich Olympic history, participating in every Games since 1900 and amassing a total of 35 medals across individual and team events. Star shooter Manu Bhaker made history on July 30, becoming the first Indian athlete to win two medals in a single Olympic edition. Bhaker, at just 22, first claimed bronze in the women's 10m air pistol event and followed it up with another bronze in the 10m air pistol mixed team event alongside Sarabjot Singh. This achievement places her among an elite group of Indian athletes, including Norman Pritchard, Sushil Kumar, and PV Sindhu, who have also won two Olympic medals. Bhaker now has the opportunity to become the first Indian to win three medals in a single Olympics when she competes in the 25m air pistol event.

India's Olympic journey began in Paris in 1900, with Norman Pritchard winning two silver medals in athletics. The country's Olympic legacy is strongly tied to field hockey, a sport introduced in 1908. India dominated hockey, winning eight gold medals between 1928 and 1980, with legends like Major Dhyan Chand leading the charge. Despite setbacks, such as missing out on gold in the 1960 Games and Milkha Singh's near-miss in the 400m final, India's Olympic spirit remains strong.

The Indian contingent for the Paris 2024 Olympics is well-prepared, with 117 athletes competing in 16 disciplines. Notably, PV Sindhu will lead India's badminton team, aiming to add to her impressive medal tally. Sponsorship deals worth ₹50 crore have been secured, with major brands supporting India's Olympic dreams. The SRM Institute is also making its mark, with student Jyothika, a two-time national champion, qualifying for the Paris Olympics. The Department of CINTEL at SRM continues to contribute to this legacy, fostering excellence in academics, research, and athletics, with hopes of becoming a future medal bank.

Be Proud! We are Indians!! We are SRMitians !!! Time Flies But leaves it's shadow always behind!

B.Amutha

SCo-Newsletter – Head

COLOSSAL

INSIDE THE ISSUE

- About the Department
- HOD Article
- Faculty Achievements
- Students Achievements
- Faculty Articles
- Workshops
- Patents and Grants
- Events
- Placements
- Industrial Collaboration
- Student Article
- Publications
- Alumni Corner

About Us.

The Department of Computational Intelligence equips students with cutting-edge knowledge in Artificial Intelligence, Machine Learning, and Software Engineering, preparing them for the future. Our curriculum emphasizes hands-on learning through key concepts—acquire, analyze, design, and implement—enabling students to tackle real-world challenges and develop innovative solutions. With opportunities to work on impactful Capstone projects, students become industry-ready professionals and future entrepreneurs. Unleash your creative potential and harness emerging technologies with us, and be the mastermind behind transformative software systems.

OUR PHILOSOPHY

The Department of Computational Intelligence offers a dynamic platform for students to master the forefront of Artificial Intelligence, Machine Learning, and Software Engineering. Our curriculum emphasizes practical, hands-on learning through a focus on key concepts: acquire, analyze, design, and implement. This approach not only equips students to tackle real-world challenges but also fosters their ability to innovate and compete effectively.

VISION FOR THE FUTURE

Through engaging Capstone projects, students gain valuable experience that prepares them for the industry and sparks their entrepreneurial spirit. With endless opportunities to explore and leverage emerging technologies, the Department of Computational Intelligence is dedicated to helping you transform your creative ideas into groundbreaking solutions and become a leader in the next generation of software systems.

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Birthday!

கடைஏழ் வள்ளல்களை
காணும் எண்ணம் எனக்கில்லை...
காரணம்,
கண் முன்னே நின் உருவம் அகலாமல் அப்படியே நிற்கிறது...
நிச்சயம் பின்னவர்கள் பிரம்மித்திடுவார்கள்
உம் சேவை அறிந்து...

நீர் தொட்டதெல்லாம் துலங்கிற்று...
சென்ற இடமெல்லாம்
உம் சிறப்பு ஓங்கிற்று...

இன்னும் வேண்டுமென்ற
உம் தாகம் இன்றளவும் தீரவில்லை...

நீர் பெற்ற கல்வியை கடைக்கோடிக்கு
கொண்டு செல்ல
ஆசிரியர் தொழில் மட்டும் போதாதென்று உணர்ந்ததாலோ
என்னவோ
கல்வி நிறுவனங்கள் பல கண்டாய்..
அதிலே,
அரசவாரிசுடன்
வறுமையில் ஊறியவனையும் சமமாய் அமர்த்தி
இன்புற்றாய்...

மற்றொரு பக்கம் சத்தமின்றி உம் ஈரமனது பாசக்கயிரை
அறுத்துக்கொண்டிருக்கிறது என்றால்
அது மிகையாகாது...

உன் உள்ளக்கிடங்கில்
உள்ளவை யாவும் தாண்டவமாய் வெளிப்படப்போகிறதென்பதை
செல்லாமல் சொல்லவே
அந்த கடவுள்
உனை தாண்டவராயபுரத்தை தேர்ந்தெடுத்து
படைத்திருப்பார் போலும்...

வயதில் சிறியவன் நான்..
ஆகவே,
வணங்கி மகிழ்கிறேன்..

இனிய பிறந்தநாள் வாழ்த்துக்கள் ஐயா...

-கோ. தினேஷ், உதவிப் பேராசிரியர்

WELCOME TO

The CINTEL Family

Mrs. Ratna kumari M

Dr. T. Grace Shalini

Mr. Navneet Nayan

Dr. Geetha P

Dr. Kamal Kishor Choure

Mr. Gowtham

Dr. Sanjit Kumar

Mr. Gowtham

Dr. Prince Chelladurai S

Dr. Vidhya B

Dr. Illakiya T

Mr.Mitul Sudhirkumar Nagar

Dr.S. Sakthitharan

Dr.S. Sivaji

Dr. Vaissnave V

Mr. Lakshmanan M

Dr. R.Vinston Raja Retnakumar

Dr.Rajalakshmi

The Olympic Games Reimagined: A Technological Renaissance

The integration of artificial intelligence (AI) into the Olympic Games heralds a new era in sports technology, offering unprecedented opportunities to enhance athletic performance, officiating accuracy, and spectator engagement. As we stand at this technological crossroads, it is imperative to examine both the potential benefits and the ethical challenges that arise from this integration

In the realm of athletic performance, AI's capacity to process vast amounts of multimodal data enables the development of highly personalized training regimens and performance strategies. Advanced machine learning algorithms can identify subtle patterns in biomechanical measurements and physiological indicators, offering insights that may elude human analysts.

This analytical prowess not only optimizes individual performance but also has the potential to democratize access to high-level coaching, potentially reshaping the competitive landscape of the Olympics.

The application of AI in officiating represents another frontier of innovation. Computer vision algorithms coupled with high-resolution sensors can provide real-time analysis of athletic performances with unprecedented precision. This technology promises to enhance the fairness and transparency of competitions, though it also raises important questions about the role of human judgment in sports.

“Beyond the Podium, when Athletes Meet AI”

Equally compelling is AI's potential to transform the Olympic spectator experience. Advanced natural language processing and computer vision technologies can deliver personalized, real-time commentary and immersive augmented reality experiences, making the Games more accessible and engaging to a global audience.

However, as we embrace these technological advancements, we must grapple with significant ethical implications. The potential for AI-enhanced doping methods, privacy concerns related to athletes' biometric data, and the risk of exacerbating existing inequalities between nations with varying levels of access to AI technologies are all critical issues that demand attention.

As we navigate this transformative period, it is crucial that we approach the adoption of AI technologies with both enthusiasm and caution. By harnessing the power of AI responsibly and ethically, we have the opportunity to elevate the Olympic experience while preserving the core values that have made the Games a beacon of human achievement for over a century.

The future of the Olympics in the age of AI is not predetermined; it will be shaped by the decisions we make today.

Dr.R. Annie Uthra
Professor and Head,
CINTEL

Faculty Achievements

- Deep Learning based methods for automobile driver identification and driving behaviour analysis thesis authored by G.Priyadharshini under the guidance of Dr.M.Ferni Ukrit.

- An Enhanced Multi-label Image Classificatiln Framework using Semi-supervised Deep Learning Techniques thesis authored by Joseph James S under the supervision of Dr. C. Lakshmi

- Adaptive deep learning model for image analytics application to MRI brain tumor classification thesis penned by Naveen P under the supervision of Dr B Diwan

- Dr. Sudha Rajesh and Dr. Anitha D completed an intensive four-day training on SAP S4/HANA. This achievement equips them with advanced knowledge to implement and support the system effectively in our organization.

- Dr. Anitha D represented the faculty at the GAIP-NUS Singapore Internship Program. This prestigious initiative offers international students a blend of academic and professional experience in Singapore.

Faculty Achievements

- Dr. A. Maheshwari has been honoured with the National Research Excellence Award by The New RAINS for outstanding contributions to research.
- Dr. B. Hariharan received the Best Paper Award at ICONDEEPCON 2024, SRMIST, Chennai, for his work on a CNN and YOLOv5-based Tourist Spot Recommendation System integrated with LLM for time suitability prediction.
- Deep Learning based methods for automobile driver identification and driving behaviour analysis thesis authored by G.Priyadharshini under the guidance of Dr.M.Ferni Ukrit
- Dr. G. Sumathy has been awarded the National Research Excellence Award by The New RAINS for exemplary achievements in research.
- Adaptive deep learning model for image analytics application to MRI brain tumor classification thesis penned by Naveen P under the supervision of Dr B Diwan
- An Enhanced Multi-label Image Classificatiln Framework using Semi-supervised Deep Learning Techniques thesis authored by Joseph James S under the supervision of Dr. C. Lakshmi
- Dr. A.R. Arunarani has been honored with the prestigious Best Researcher Award at the international level by the Knowledge Research Academy.
- Dr. S. Amutha has received the international Reviewer Award from the Kalpataru Institute of Technology, Tiptur.

STUDENT ACHIEVEMENTS

- Aagam Chhajer, a student from the CINTEL Department with roll number RA2211047010110, participated in the Synapse National Level Hackathon hosted by PES University, Bangalore, where he achieved an impressive 3rd place and was awarded a cash prize of ₹20,000.

- Manas Pratap Singh,RA2211026010097, successfully completed the "DBMS Course - Master the Fundamentals and Advanced Concepts," hosted by Scaler Topics, demonstrating his expertise in database management systems.

- Divjyot Kaur Saini RA2211026010117, completed building a website on-Pharmaceutical Database Management System

- Saketa Sri Ramacharyulu Gudimella, RA2211026010111, participated in the HACK2TECHSUSTAIN National Hackathon hosted by Madras Institute of Technology and earned the Runner-Up position.

- Vishvvesh Nagappan, RA2211026010099, participated in HACKLIPSE, a hackathon hosted by ACM Thapar.

- Rose Mary Biju, RA2211026010101, successfully completed her virtual web development internship hosted by Prodigy Infotech, gaining valuable experience and skills in the field.

- The Department of CINTEL students won the Barclays Chennai hackathon over 50+ teams from India. The third-year AIML students are Ashish Kumar Srivastava, Johan Mathew Joseph, Ananya Kinha, and Yashwardhan Khanna.

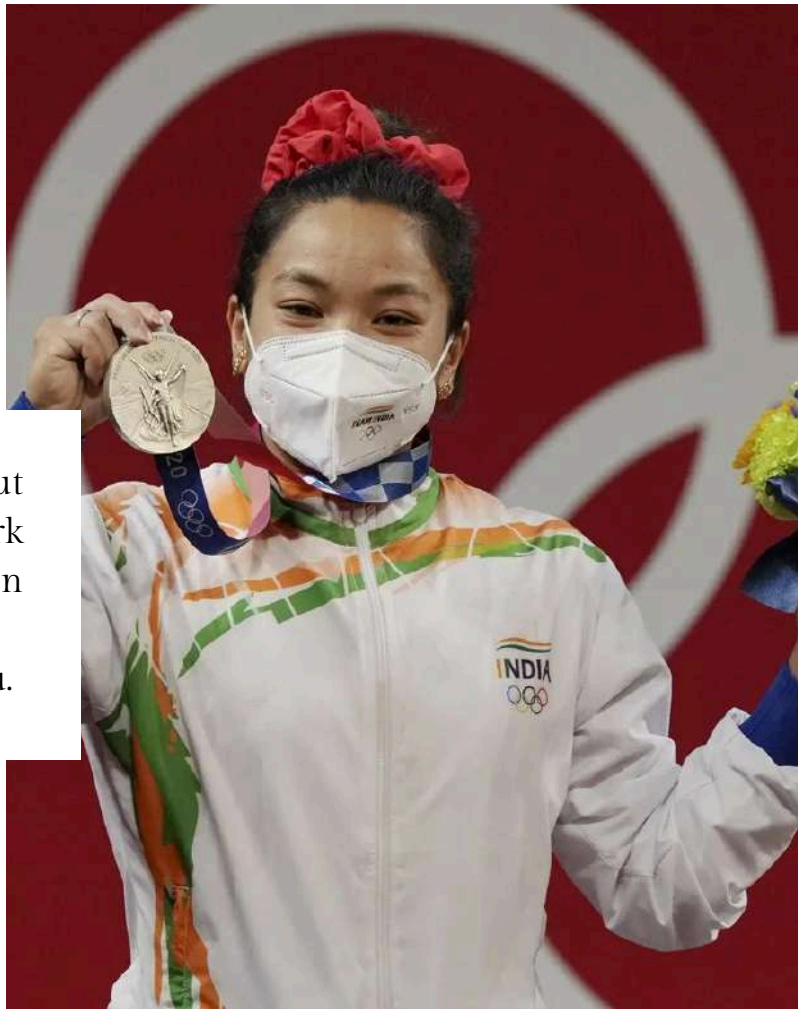
- The team comprised of Hariharan Mudaliar, Omkar Chowdary, Murali Sai Valiboyina, and Abhiramsai Mamidala from the Department of Computational Intelligence, School of Computing! They won First Prize at SRM Hackathon 8.0 (April 8-9, 2024) with their project "Medilingual," a CNN and Transformer-powered Localized Medical Assistant.

STUDENT ACHIEVEMENTS

- A. Akhil a student of 2nd year is doing a semester abroad program at the University of Syndney, Australia.
- Shrinikesh B.S., a third-year student from the CSE-AIML department at SRMIST, KTR, has secured an opportunity to further his academic journey at UC Davis, California, USA.
- Mahesh Datta Sai a 4th year student of CINTEL department is also doing a semester University of Tubingen, Germany.
- A student of CINTEL department Yash Rai Sharma, of VECTECH CONSULTING PRIVATE LTD, received recognition as a startup from the Department for Promotion of Industry and Internal Trade on April 29, 2023, and operates in the 'Enterprise Software' and 'Customer Support' sectors.
- Vishvvesh Nagappan, RA2211026010099, completed the Google AIML Internship hosted by AICTE.
- Chudasama Adityasinh, RA2311033010021, participated in Healthathon, a competition hosted by Kashi Institute of Technology.
- Anshul Kawarey, RA2211033010168, participated in Stage 2 of the ABU Robocon competition and achieved an impressive score of 90/100.
- Team ByteTribe, comprising Saketa Sri Ramacharyulu Gudimella, Anwin Sharon , and Kushagra achieved an impressive 2nd place at the National Level Hackathon hosted by MIT.
- Neev Agarwal, a second-year student, has secured a prize of ₹1,75,000 as a member of the Bonk SUPERTEAM. His exceptional performance in the competition has brought him well-deserved recognition.
- Kavyansh Kumar, also a second-year student, has been awarded a prize of ₹1,75,000 as part of the Bonk SUPERTEAM. His achievements reflect his dedication and skill, earning him this significant honor.

THE IRON WILL BEHIND INDIA'S OLYMPIC GLORY

> Dream Big. We should dream big but always start small. One should work hard on it with concentration, only then it will definitely be completed
>
> — Mirabai Chanu.



A girl, born on August 8, 1994, in the small village of Nongpok Kakching in Manipur, India, emerged as one of the most inspiring figures in the world of weightlifting. From a young age, Mirabai displayed an extraordinary physical strength that set her apart from her peers. Her journey from a remote village to the global stage is a story of perseverance, determination, and unyielding spirit.

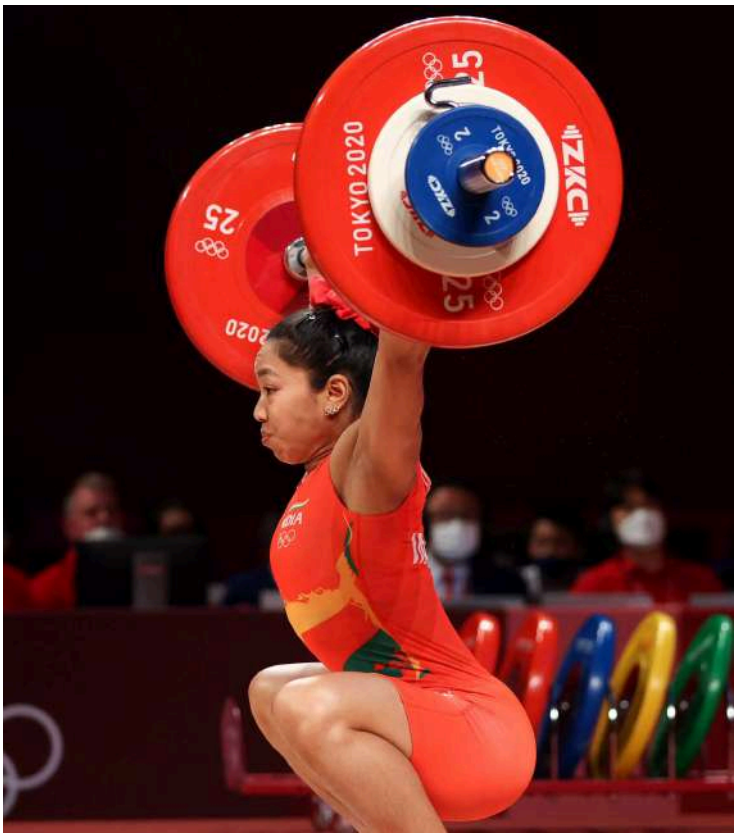
As a child, she was fascinated by the tales of strength and courage in Manipuri folklore. Her family, though of modest means, supported her dreams. She often helped her family with daily chores, effortlessly carrying firewood, which first revealed her physical strength. It was this raw strength that caught the attention of her first coach, who encouraged her to take up weightlifting.

Her training began in earnest at a local sports academy, where she quickly outshone her peers. Despite the challenges she faced, including limited resources and the societal expectations placed on young girls in her community, she remained focused on her goal. Her talent was undeniable, and she soon began to make a name for herself at the national level.

Her breakthrough came in 2014 when she won a silver medal at the Commonwealth Games in Glasgow. This achievement was a significant milestone in her career, propelling her into the spotlight and giving her the confidence to aim even higher. However, the path to greatness is rarely smooth. In the 2016 Rio Olympics, faced one of the most challenging moments of her career when she failed to lift in any of her three attempts in the clean and jerk category. The disappointment was immense, but she was not one to be deterred.

Rather than letting the setback define her,she used it as fuel to drive her forward. She returned to training with renewed vigor, determined to redeem herself on the world stage. Her hard work paid off in 2017 when she won the gold medal at the World Weightlifting Championships in Anaheim, California. This victory was a testament to her resilience and marked her as a force to be reckoned with in the sport.

The pinnacle of her career came at the Tokyo 2020 Olympics, held in 2021 due to the pandemic. Competing in the women's 49 kg category, she lifted a total of 202 kg (87 kg in snatch and 115 kg in clean and jerk), securing a silver medal for India. This historic win made her the first Indian weightlifter to win an Olympic silver medal and the second Indian weightlifter to win an Olympic medal after Karnam Malleswari's bronze in 2000.



Her story is not just one of personal achievement but also one of inspiration for millions. She embodies the spirit of perseverance, showing that with hard work, dedication, and resilience, it is possible to overcome even the most daunting obstacles. Her success has brought attention to the sport of weightlifting in India and has inspired a new generation of athletes to pursue their dreams, no matter how challenging the journey may be.

An Olympic silver medallist, a world champion, and a three-time Commonwealth Games gold-medallist, she has firmly established herself as one of India’s finest weightlifters. Competing in the women's 49kg weightlifting event at the Paris 2024 Olympics, she showcased her immense skill and determination. Despite her remarkable effort, lifting 88kg in Snatch and 111kg in Clean and Jerk for a total of 199kg, she narrowly missed the podium, finishing in 4th place, just 1kg behind Thailand's Surodchana Khambao, who claimed the bronze medal.

Dr. Anupama C.G
Assistant Director, International Relations

WORKSHOPS

Cloud Orcastration

·The CINTEL-IEI Student Chapter, in association with IEI, recently hosted an enlightening technical talk on "Cloud Orchestration" on April 16, 2024. This highly anticipated event featured an eminent industry expert who delved into the complexities and innovations of cloud orchestration.

Agile Methodologies

On June 20 and 21, 2024, final-year SCO students received extensive Agile Methodologies training at TP Ganesan Auditorium for small and large projects. Students learned project management, collaboration, and communication skills through hands-on Microsoft Office 365 training.

Mock Interviews On MERN Stack

SRM Institute of Science and Technology Department of Computational Intelligence conducted a fantastic Placement Talk on Mock Interviews for Freshers Recruitment, focusing on the MERN stack. This event's resource was Pune-based software developer Ashwin M. He gave enthusiastic students sound advise based on his vast knowledge.

WORKSHOPS

5-day workshop on "Raspberry Pi Fundamentals"

The Department of Computational Intelligence, in collaboration with Intel under the INTEL Unnati Program, organized a 5-day workshop on "Raspberry Pi Fundamentals" specifically designed for 2nd-year AI and M.Tech (Integrated) students.

The sessions were led by a team of experts from INTEL EDULATERAL, including Dr. Salai Deva, Ms. Rajee V, and Mr. Mani, all of whom brought their extensive experience and expertise to guide students through the intricacies of Raspberry Pi.

Industrial Perspective in Java Programming

Industrial Perspective in Java Programming, a value-added course, was conducted on April 3-5, 2024. The workshop, led by Rajkumar from Blesant Technologies, Chennai, provided students with practical insights into Java's application in industry.

Patents & Grants

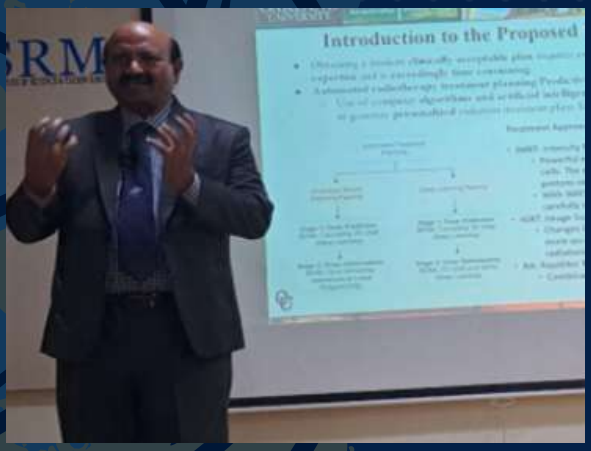
- Dr. S. Krishnaveni and Dr. M. Karpagam have pioneered an IoT-powered glove wearable device aimed at personalized post-stroke rehabilitation and monitoring.
- An innovative study on perovskite sensors-based gas monitoring in Li-ion batteries, approached from a deep learning perspective, has been authored by Dr. Nagendra Prabhu.
- In the realm of healthcare, Dr. G. Tamilmani explores privacy-preserving healthcare records through the integration of blockchain and NLP.
- A patent for a system and method for intrusion detection and mitigation support has been awarded to S. Krishnaveni and Jothi B., marking a significant contribution to security technology.
- Maragatham G. has developed a method and device specifically designed for predicting psychotic disorders, pushing the boundaries of mental health diagnostics.
- With a focus on health technology, Dr. R. Beaulah Jeyavathana presents an IoT-based breath analyzer.
- Dr. Robert Singh A. has introduced an IoT-enhanced sun tracking solar panel, advancing renewable energy solutions.
- The Internet of Things takes a leap forward with Dr. U. Sakthi's development of an X-ray machine. Also authored by Dr. U. Sakthi, a learning toy for children's education demonstrates innovative approaches to early learning. Adding to his contributions, Dr. U. Sakthi has crafted an IoT-based vitamin deficiency detection machine, addressing essential health needs.
- Dr. N. Gopinath's work on IoT-based rain forecasting, coupled with flood detection and an automated alert system, showcases the power of artificial intelligence in environmental monitoring.
- A groundbreaking artificial intelligence framework for anomaly detection in IoT networks has been authored by Joseph James, highlighting advancements in machine learning techniques.
- Plant health monitoring has been revolutionized by Dr. N. Gopinath's IoT-based system, which includes nutrition control and disease prediction and control.
- Kaviyaraj R. and Uma have authored a system and method that optimize robotic control for performing remote operations, pushing the limits of automation.

Patents & Grants

- Blockchain-based public integrity verification for cloud storage is the focus of a study authored by Kaviyaraj R., Sureshkumar, and Manoj, addressing the challenges posed by procrastinating auditors.
- M. Maheswari and A. Saranya have developed a secure locker system, along with a comprehensive method to ensure safety and security.
- Dr. S. Nagendra Prabhu, alongside Dr. G. Sivashankar, Dr. R. Babu, Dr. R. Udendhran, and Dr. Kanipriya M., has made strides in medical technology with a device dedicated to brain tumor detection.
- The concept of a robotic waste bin has been brought to life by Dr. Sudha Rajesh, reflecting innovation in waste management.
- An AI-based wearable social distance alerting device has been authored by Dr. A. Maheswari, Dr. S. Amudha, and Dr. Sumathy G., contributing to public health safety.
- Dr. Maheswari A. introduces a double jaw angle holding profile vice, showcasing advancements in mechanical engineering.
- A portable pick and place industrial robot, developed by Dr. K. Vijayalakshmi, represents a leap forward in industrial automation.
- Hariharan B. focuses on personal safety with the creation of a specialized device designed for user protection.
- The intersection of AI and muscle activity recognition is explored in a system authored by Dr. Sudha Rajesh, utilizing deep network techniques in EMG signals.
- A wearable IoT healthcare device with real-time health data analysis capabilities has been developed by Manikandan M., integrating machine learning for enhanced medical care.
- M. Uma addresses attention deficit hyperactivity disorder (ADHD) with a sensor-based monitoring system, offering a new approach to managing this condition.
- Dr. A. R. Arunarani has contributed to environmental sustainability with the invention of a solar-powered dustbin, merging clean energy with waste management.

EVENTS

- The monthly research seminar on June 25, 2024, featured insightful presentations by Prof. Catherine Prentice and Prof. Minu R I. Prof. Prentice discussed the impact of emotional and artificial intelligence on corporate performance, highlighting their role in enhancing decision-making and customer engagement. Prof. Minu R I focused on optimizing automobile sales predictions using advanced forecasting models and machine learning algorithms, emphasizing improvements in inventory management and strategic planning. The seminar offered valuable insights for enhancing business strategies.

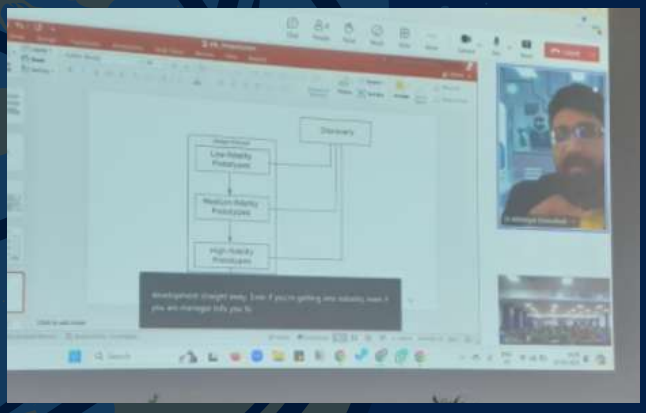


- On July 22, 2024, a distinguished guest, Dr. Vijayan Sugumaran, Co-Director of the Center for Data Science and Big Data Analytics at the School of Business Administration, Oakland University, delivered two insightful talks on "Pursuing Graduate Study Options at Oakland University," and "DEConvGraph 3D UNet: A Novel Deep Learning Model for Optimizing Radiotherapy Treatment Plans in Oropharyngeal Cancer," also he presented groundbreaking advancements in deep learning applications for healthcare.

- The seminar "Navigating the Path to Global Education - All About Studying Abroad," held on 10th July 2024, provided final-year students with key insights into pursuing higher education abroad. Presented by Mr. Vaibhav Gupta, Co-founder of iSchoolConnect, and Mr. Daison Davis, Head of Student Success at iSchoolConnect, the session covered essential topics such as selecting the right country and university, preparing for standardized tests like GMAT and IELTS, managing finances, securing scholarships, and navigating the visa application process.

EVENTS

- On 12th July 2024, an online awareness program on the Semester Abroad Program was held via Google Meet, led by Dr. Anubama, Assistant Director of International Relations at SRM IST, KTR. The session informed students about the benefits of studying abroad, offering guidance on course and university selection, exam preparation, financial planning, scholarships, and the visa process. Faculty shared insights on aligning academic goals with study abroad options and managing expenses. The interactive session allowed students to seek personalized advice, leaving them better prepared for their international education journey.



- On April 25, 2025, a technical seminar session was held at MINI HALL-2, T.P. Ganesan Auditorium, SRMIST, from 2:00 PM to 3:00 PM, featuring Dr. Mithilesh SathyaNarayanan, Scientist at MIT Square London. Dr. SathyaNarayanan provided valuable insights into the importance of product development and design strategies, emphasizing the significance of a proactive approach in the design and development process. The seminar offered attendees a deep understanding of how strategic foresight in design can drive innovation and success in product development.

- Sustainability Summer School options from the University of Edinburgh were presented in UB Block Seminar Hall 1 on April 16, 2024. The event informed second-semester undergraduates, particularly CINTEL students, about summer school options for postgraduate studies. Students from other departments interested in sustainability-focused Master's degrees and first-year students considering articulation alternatives (2+2 or 4+1 programs starting in 2025) were encouraged to attend.

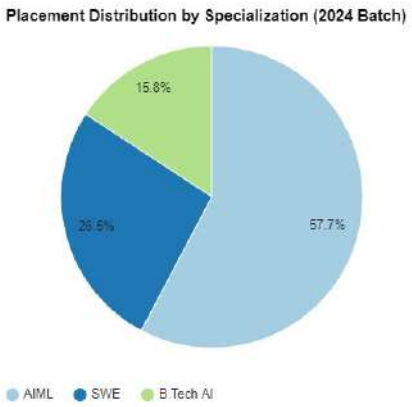
EVENTS

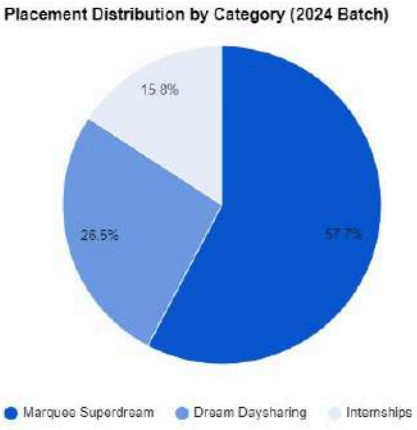
- **Dr. Vijayan Sugumaran, Co-Director of the Center for Data Science and Big Data Analytics at Oakland University, visited SRMIST on July 22nd, 2024. He delivered a technical session on "DE-ConvGraph 3D UNet: A Novel Deep Learning Model for Optimizing Radiotherapy Treatment Plans in Oropharyngeal Cancer" . Later,he had a productive discussion with the three collaborative project team members: Dr. R. Annie Uthra, Dr. Maragadham, Dr. M. Ferni Ukrit, Dr. Jackulin, Dr. Beaulah Jeyavathana, and Dr. Athilakshmi.**

- On 16th of May the department of Computational Intelligence hosted the Farewell for Batch of 2024 , as they embark on a new chapter of their lives ,we the department of CINTEL wishes them a future full of success and happiness. Their time here has been remarkable marked with growth and resilience.

PLACEMENTS

In April, the Cintel department's placement distribution showed a strong preference for Dream Daysharing and internships across three specializations: AIML, SWE, and B. Tech AI.

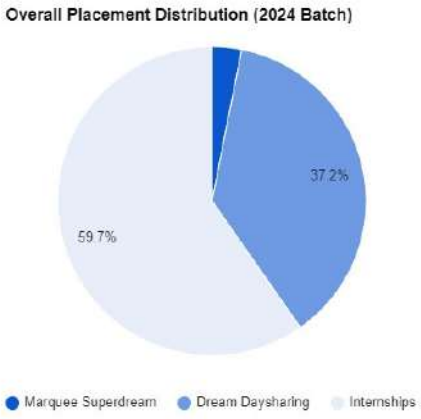




For the 2024 batch, AIML excelled with 272 offers, followed by SWE with 130 and B.Tech AI with 69, maintaining a high placement rate, particularly in AIML. Marquee Superdream placements remained limited.

The 2025 batch is at the beginning of its placement journey, emphasizing internships.

Overall, the 2024 batch demonstrated significant success in placements, particularly in AIML, while the 2025 batch is expected to see increased offers as the season progresses, with current placements at 8.38% overall.



Industrial Collaboration

- As part of the ongoing collaboration between the Department of CINTEL and Renault Nissan Industry Limited Private Limited (RNAIPL), 12 students had the opportunity to participate in an intensive 15-day internship at the RNAIPL plant. This hands-on experience allowed students to gain valuable industry insights and practical knowledge, enhancing their academic and professional development.

The faculty team comprises of Dr.R.Udendhran, Dr.R.Babu, Dr.G.Dinesh headed by Dr.S.Selvakumarasamy from the Department of Computational Intelligence have visited the Mahindra SUV Proving Track at cheyyar to discuss about the AI Automation in their Plant.

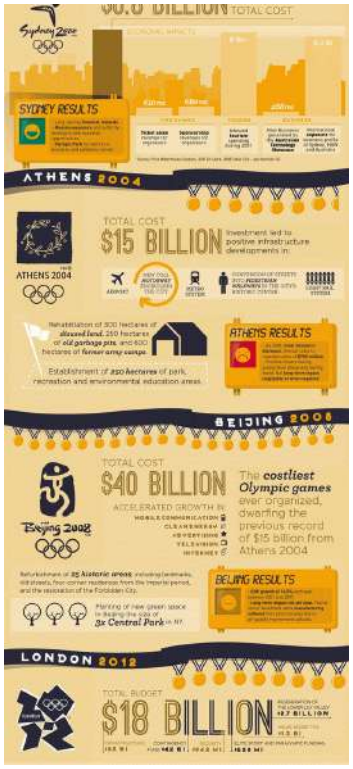
- In a parallel initiative, the AI-driven Discovery Hub, an industry-sponsored lab by Sentient Scripts Private Limited, Trivandrum, Kerala, has made significant strides. Proof of Concepts (POCs) have been successfully completed for three innovative use cases, marking a crucial milestone. The lab is now gearing up to commence project work starting from July, further solidifying its role as a center for cutting-edge research and development.

- The Advanced Technology Lab, another industry-connected workspace established in collaboration with Renault Nissan Automotive India Private Limited, Oragadam, Chennai, has also made notable progress. With Phase I of the project successfully completed, students began their internships at the facility on June 3rd, 2024. A dedicated faculty team, visited the RNAIPL plant on July 3rd, 2024, to officially inaugurate the student internship program.

THE OLYMPIC GAMES: A DOUBLE-EDGED SWORD

The Olympic Games, a spectacle of human achievement and international unity, carry far-reaching implications beyond the realm of sports. Let's dive into the fascinating world of Olympic economics, sustainability efforts, and political intrigue.

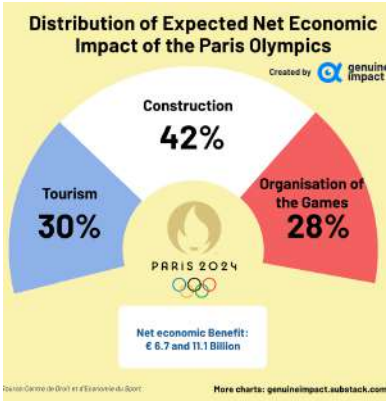
Hosting the Olympics is like throwing the world's most expensive party. Cities dream of economic windfalls, but the reality often falls short. Sure, there's a flurry of job creation and infrastructure development. Rio de Janeiro, for instance, built 15,000 new hotel rooms, while Sochi splurged a whopping $44.3 billion on non-sports infrastructure.



OLYMPIC RINGS OR ECONOMIC NOOSE?

But here's the kicker: most host cities end up with a financial hangover. London 2012 brought in $5.2 billion but spent $18 billion. Vancouver's 2010 Winter Games? A $4.8 billion loss. Beijing's 2008 extravaganza? They spent over $40 billion for a mere $3.6 billion return. It's like buying a designer outfit for a one-night event – flashy, but hardly cost-effective.

The real economic party pooper? Maintenance costs. Sydney's stadium guzzles $30 million annually, while Beijing's Bird's Nest arena gobbles up $10 million yearly. Montreal took 30 years to pay off its 1976 Olympic debt. Talk about a long-term commitment!Surprisingly, Los Angeles stands alone as the profit-making host, thanks to its existing infrastructure. Maybe there's a lesson here about working with what you've got?



In an era of climate crisis, the Olympics are stepping up their game. Future hosts must tackle climate change head-on, with Paris 2024 aiming to halve its carbon footprint compared to previous games. It's like the Olympics are competing for a medal in sustainability!

The International Olympic Committee (IOC) isn't just talking the talk. They're walking the walk with a commitment to slash their carbon emissions by 50% by 2030. Their headquarters, Olympic House, is one of the world's most sustainable buildings. Now that's leading by example!

THE OLYMPIC GAMES: A DOUBLE-EDGED SWORD

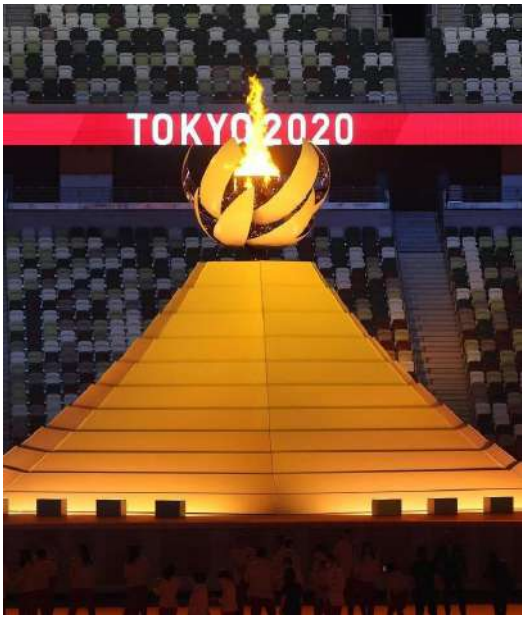
The Olympics aren't just about sports – they're a political chess game. Host countries flex their soft power, showcasing their culture and economic might. It's like a global PR campaign on steroids.

But it's not all glitz and glamour. The Games have a history of controversy, from diplomatic boycotts to human rights scrutiny. Remember the U.S. boycott of the 1980 Moscow Olympics? Or the raised fists of Tommie Smith and John Carlos in 1968? These moments remind us that the Olympics are as much about global politics as they are about athletic prowess.

"GOLD MEDALS AND DIPLOMATIC CHESS"

The Games can be a double-edged sword for hosts. While they can boost national pride and unity, they can also shine a spotlight on social issues and human rights concerns. Just ask Beijing about the 2008 Games and the attention it brought to Tibet.

During the Cold War, the Olympics became an ideological battleground between East and West. Each medal was a small victory in the larger political war. Even today, the Games continue to reflect and influence international relations.



In conclusion, the Olympic Games are far more than just a sporting event. They're a complex tapestry of economic challenges, sustainability efforts, and political maneuvering. As we look to future Games, one thing is clear: the Olympics will continue to be a fascinating microcosm of our global society, reflecting our triumphs, challenges, and aspirations on the world stage.

Dr. S. Selva Kumara Samy
Associate Professor,
CINTEL

FACULTY UPSKILLING

Exploring Quantitative Techniques for Enriching Qualitative Insights in Data Science Research

A one-week Faculty Development Program (FDP) on “Exploring Quantitative Techniques for Enriching Qualitative Insights in Data Science Research” was successfully conducted from 22nd to 26th July 2024.

The program featured a panel of esteemed experts, including Mr. Vijayalaya Srinivas T., Head of Psychology at CHRIST (Deemed to be University), Bengaluru, Ms. Akshaya Chandrasekar, Global Operation Analyst at Hitachi Energy, Chennai, and Dr. Joseph Hosanna Raj Isaac, Data Scientist III at GAIA, Ericsson India, Chennai.

Secured Serverless IoT Gateway for AI Applications

The SIGAIB Monthly Research Seminar was held on Tuesday, July 30, 2024, from 9:30 AM to 10:30 AM, featuring two insightful presentations. Mr. Anunaya Sinha delivered a talk on "Secured Serverless IoT Gateway for AI Applications," where he explored cutting-edge advancements in IoT security and serverless architecture for AI-driven solutions. Following this, Dr. V. Kavitha from the School of Computing, SRMIST, presented on “Enhancing Large-Scale Graph Visualization with mbtileServer and Tippecanoe,” offering an in-depth look at innovative tools and techniques for managing and visualizing large-scale graph data. The seminar provided a platform for sharing knowledge and fostering discussions on emerging technologies in AI and data visualization.

FACULTY UPSKILLING

Faculty Development Program (FDP) on Programming and Problem-Solving

From May 28–30, 2024, the School of Computing, SRM Institute of Science and Technology, hosted a successful ACM India Faculty Development Program (FDP) on Programming and Problem-Solving. Dr. Viraj Kumar, Visiting Professor at the Divecha Centre for Climate Change, IISc, Bangalore, delivered insightful sessions.

The program, was inaugurated by Dr. Revathi Venkataraman, Chair of the School of Computing.

Deep Learning Using Python

·The School of Computing's Department of Computational Intelligence held a 5-day Faculty Development Programme (FDP) on "Deep Learning using Python" from May 13-17, 2024. The initiative benefited faculty from other departments than the School of Computing. Participants learned about cutting-edge deep learning and Python implementation in an intensive and engaging course. The FDP gave instructors a thorough understanding of deep learning algorithms, frameworks, and applications, enabling them to incorporate these sophisticated techniques into their curriculum.

PUBLICATIONS

- Dr.S.P.Angelin Claret's paper on AI-driven enhanced skin cancer diagnosis using convolutional neural networks and discrete wavelet transformation has been published in the Egyptian Journal of Medical Human Genetics.
- S.Raguvaran's paper on Twitter sentiment analysis using conditional generative adversarial networks has been published in the International Journal of Cognitive Computing in Engineering.
- Dr. Gopirajan's PV's paper on using Machine Learning and OpenCV for driver drowsiness detection has been published in IEEE Xplore.
- Dr. Gopirajan's PV's paper on the Certificate-less Aggregate Signature Authentication Scheme (CLASAS) for secure data transmission in Wireless Sensor Networks is now published in Peer-to-Peer Networking and Applications.
- Dr. AR Arunarani's paper on Intelligent Transportation Systems, exploring digital twin technologies in smart grids, transportation systems, and smart cities, has been published in IEEE Xplore.
- Dr. B. Pitchaimanickam's paper on Monitoring Systems for Mountain Climbers using IoT has been published in IEEE Xplore.
- Dr. E. Poongothai's paper on Image-Based Early Classification of Tomato Leaf Diseases Using Deep Neural Networks has been published in IEEE Xplore.
- Dr. E. Poongothai & Dr .T R Saravanan's paper on Machine Learning Driven Cardiovascular Disease Prediction Among Male Senior Adults has been published in IEEE Xplore.
- U Sakthi's paper on Smart Healthcare Based Cyber Physical System Modeling by Block Chain with Cloud 6G Network and Machine Learning Techniques has been published in Wireless Personal Communications.
- Dr. M. Ferni Ukrit's paper on Fetal Health Classification and Visceral Fat Level Prediction using Gradient Boosting and Deep Learning Techniques has been published in IEEE Xplore.
- Dr. B. Hariharan's paper on DDoS and Botnet Attacks: A Survey of Detection and Prevention Techniques has been published in IEEE Xplore.
- Dr. S.P. Angelin Claret's paper on lung nodule detection for CT-guided biopsy images using deep learning has been published in Journal of Applied Engineering and Technological Science.

PUBLICATIONS

- Dr. Robert Singh A's paper on RM-Dense Net, An Enhanced Dense Net Framework with Residual Model for Breast Cancer Classification Using Mammographic Images has been published in IEEE Xplore.

- Dr. Sherin Shibi C's paper on Deep Cryogenic Temperature CMOS Circuit and System Design for Quantum Computing Applications has been published in EAI Endorsed Transactions on Energy Web.

- Dr. Sherin Shibi C's paper on A Survey about Post Quantum Cryptography Methods has been published in EAI Endorsed Transactions on Energy Web.

- Dr. N. Kanimozhi's paper on Intelligent Transportation Systems, exploring digital twin technologies in smart grids, transportation systems, and smart cities, has been published in IEEE Xplore.

- Dr. R. Athilakshmi's paper on Action Recognition for Intelligent Surveillance System
- using LRCN with attention mechanisms has been published in IEEE Xplore.

- Dr . Sridevi Ponmalar P's paper on Secure Goods Storage and Anti- Theft Approach using Ethereum Blockchain has been published in Procedia Computer Science.

- Dr . Sridevi Ponmalar P's paper on Deep Learning Video Streaming Web Application with AI Botsusing NLP has been published in IEEE Xplore.

- Dr. C. Lakshmi's paper on Design of Novel Brain Tumor Segmentation System using Hybrid Heuristic-Aided Multiscale Self-Guided Attention Mechanism based Adaptive Unet+++ with 3D Brain MRI images Mechanism Bas has been published in International Journal of Pattern Recognition and Artificial Intelligence.

- Dr. Kanipriya M's paper on Deciphering Disruptive Discourse , Leveraging BERT and CNN for Detrimental Content Detection has been published in IEEE Xplore.

- Dr. Athira M Nambiar's paper on Exploring Fusion Techniques and Explainable AI on Adapt- Fuse Net, Context-Adaptive Fusion of Face and Gait for Person Identification has been published in IEEE Transactions on Biometrics, Behavior, and Identity Science.

- Dr. S.P. Angelin Claret's paper on Voice Assistant for Hearing and Speech-Impaired Individuals Using Web framework has been published in 2024 2nd International Conference on Networking and Communications (ICNWC).

- Dr Maheshwari .A's paper on Monitoring and Identification of Various Glucose Levels of Diabetes Patients Using Edge Based Machine Learning Approach has been published in Journal of Electrical Engineering and Technology.

PUBLICATIONS

- Dr Maheshwari .A's paper on Propchain: Decentralized Property Management System has been published in Lecture Notes in Networks and Systems.
- Dr Maheshwari .A's paper on Enhancement of Security in Cloud Computing Using Optimal Risk Access Control Model has been published in IEEE Xplore.
- Dr Maheshwari .A's paper on Hybrid Genetic Algorithm with a New Fitness Measure of Clusters for Training Special Children has been published in IEEE Xplore.
- Dr Maheshwari .A's paper on Hybrid K-Means Clustering for Grouping the Special Children Using Computational Techniques has been published in IEEE Xplore.
- Dr. Reshmy A.K.'s paper on Towards Precision Agriculture: Harnessing Deep Learning for Accurate Plant Disease Diagnosis has been published in IEEE – 2024 International Conference on Communication, Computing and Internet of Things.
- U Sakthi's paper on A Comprehensive Multimodal Analysis for Detecting Pulmonary Infiltrates in Chest X-ray Image has been published in Third International Conference On Distributed Computing and Electrical Circuits and Electronics (ICDCECE).
- U Sakthi's paper on Multi-Model CNN Approaches for Prediction of Brain Tumor using MRI Images has been published in International Conference on Advancement in Computation & Computer Technologies (InCACCT).
- Dr. R. Beaula H Jeyavatha's paper on Maternal Health Risk Prediction with Machine Learning Methods has been published in IEEE Xplore.
- Dr T R Saravanan's paper on Healthcare security in cloud-based wireless sensor networks: Botnet attack detection via autoencoder-aided goal- based artificial intelligent Agent has been published in Concurrency and Computation: Practice and Experience.
- Dr. Pritam Khan's paper on Document Summarization Leveraging Modified LexRank Algorithm has been published in Advanced Computing and Intelligent Technologies , ICACIT 2023 – Springer Nature.
- Dr.S.Krishnaveni's paper on CyberDefender an integrated intelligent defense framework for digital-twin-based industrial cyber-physical systems has been published in the journal Cluster Computing.

PUBLICATIONS

- Dr. S. Krishnaveni's paper on Diabetic retinopathy detection and severity classification using optimized deep learning with explainable AI technique has been published in journal Multimedia Tools and Applications.

- Dr. R. Annie Uthra's latest publication, titled 'On-device Intelligence for AI-enabled Bio-inspired Autonomous Underwater Vehicles (AUVs),' has been featured in the journal IEEE Access.

- Dr. C. Lakshmi's paper on Segnet with Unet3+ and EfficientNet: a novel framework of brain tumour segmentation and classification model by multiscale attention-based deep learning techniques with hybrid heuristic improvement using 3D MRI brain images has been published in The Imaging Science Journal, Taylor and Francis.

- Meenakshi N has authored a paper titled 'Efficient Communication in Wireless Sensor Networks Using Optimized Energy Efficient Engroove Leach Clustering Protocol,' which has been published in the journal Tsinghua Science and Technology.

- Dr. Dinesh G's paper on Secure and Efficient Wireless Sensor Network and Machine Learning -based Monitoring System for Student Physical and Mental Health has been published in Journal of Electrical Systems.

- Dr. N. Kanimozhi's paper on Morpho-contour exponential estimation algorithm for predicting breast tumor growth from MRI imagery has been published in International Journal of Information Technology (Singapore).

- Dr. S. Nagendra Prabhu has published a paper titled 'HE-Gaston Algorithm for Frequent Subgraph Mining with Hadoop Framework' in the journal Expert Systems with Applications.

- Dr. R Annie Uthra's paper on 'Ensemble framework for concept drift detection and class imbalance in data streams ' has been published in the journal Multimedia Tools and Applications.

- Dr. S. Krishnaveni has published a paper titled 'NexGuard: Industrial Cyber-Physical System Defense using Ensemble Feature Selection and Explainable Deep Learning Techniques' in IEEE Xplore.

- Kanipriya M's paper on Analysis of Electromyography Signals for Control of Mechanical Prosthesis using Machine Learning Techniques has been published in IEEE Xplore.

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- Dr. Gopirajan PV and Dr. SADAGOPAN S has published a paper titled 'Development and Evaluation of a Speech Recognized Voice Bot' in IEEE Xplore.
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- Amutha A L's paper on Identification of Parkinson's Disease Using Stacking Classifier has been published in Journal of Electrical Systems.
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Paralympics

I talk about the Paralympics as a goal, not a dream, because dreams are a thing you get to live your whole life. The Paralympics just happen in that moment. A dream is a lifelong thing to me.

The Paralympic Games or Paralympics, also known as the Games of the Paralympiad, is a periodic series of international multisport events involving athletes with a range of disabilities.

Paralympic athletes embody the highest ideals of humanity – they challenge the boundaries set by society and aim to develop and maximize their potential as world-class athletes.

Special Olympics is solely for athletes with intellectual disabilities. The Paralympics focus more on physical disabilities. The Olympics and Paralympics are about elite competition and specialization, and the athletes compete in Olympic and Paralympic Games only once every four years in their sport.

Intresting

Murlikant Petkar was given a nickname “Chandu Champion”.To know about this more Chandu Champion is a hindi language sports drama film based on the life of Murlikant Petkar, directed by Kabir Khan and enacted by Kartik Aryan.

Murlikant Petkar

Murlikant Petkar is India's first Paralympic gold medalist. He won an individual gold medal in the 1972 summer Paralympics in Heidelberg, Germany with a Peraplegic condition. He set a world record in the 50 freestyle swimming event, at 37.33 seconds.

Murlikant Petkar was born on 1 November 1944 in Peth Islampur region of Sangli,Maharashtra .Growing up, Petkar had a deep passion for sports, particularly boxing, a sport that demands not just physical strength but also mental fortitude. His talent in the ring quickly became evident, and it wasn’t long before the Indian Army took notice.

He was private or jawan of the craftsman rank in the Corps of Electronics and Mechanical Engineers(EME) in the Indian Army. He was disabled during the 1965 war against Pakistan, sustaining severe bullet wounds. Petkar was originally a boxer at EME, Secunderabad. After he got disabled, he switched to swimming and other sports. He participated in table tennis at the 1968 Summer Paralmpics and cleared the first round. He won four medals in swimming. He was later employed by TELCO in Pune.

Awards

·Paralympics gold medal in 1972.
·Padma Shri - 2018
·Shiv Chhatrapati Award – 1975

Achievements Galore

Throughout his sporting career, Murlikant Petkar has won several laurels for the country at events like the Stoke Mandeville International Paraplegic Meets held in England, where he consistently outdid his own records.

He has won the General Championship Cup for 5 consecutive years (1969-73).

He bagged Gold in 50M Freestyle Swimming at the 3rd Commonwealth Paraplegic Games held at Edinburgh, Scotland. At the same event, he also won Silver in Javelin Throw and Bronze in Shot-put.

Aman Ray
CSE-AIML-AG2
RA2311026011066

Celebrating Excellence

NAAC

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

The National Assessment and Accreditation Council (NAAC) is an autonomous body in India that evaluates and accredits higher education institutions (HEIs) such as universities and colleges. Established in 1994 by the University Grants Commission (UGC), NAAC's primary aim is to assess and promote the quality of education in India's higher education system.

WE ARE PLEASED TO INFORM THAT SRM INSTITUTE OF SCIENCE AND TECHNOLOGY HAS BEEN ACCREDITED BY NAAC WITH

Celebrating Excellence

NATIONAL INSTITUTIONAL RANKING FRAMEWORK

The National Institutional Ranking Framework (NIRF) is an initiative by the Ministry of Education (formerly the Ministry of Human Resource Development), Government of India, to rank higher education institutions across the country. Launched in 2015, NIRF provides a transparent, accountable, and objective method for ranking universities and colleges in India based on a set of criteria.

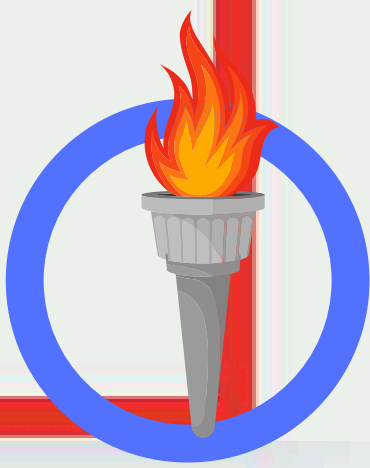
WE ARE PLEASED TO INFORM THAT SRM INSTITUTE OF SCIENCE AND TECHNOLOGY RANKS AT

ALUMNI CORNER

- ·The DAA and Department of Computational Intelligence held an Online Alumni "Mock Interview" on April 30, 2024. This intriguing event was conducted by Zoho, Chennai software developer Anirudh G. An industry expert gave students interview preparation tips. Anirudh G taught pupils interview tips from his experience. He shared his experiences and individually assessed strengths and weaknesses. This mock interview taught students the procedure and how to learn from mistakes. He taught students problem-solving and communication for technical interviews. Students gained career confidence and knowledge at the event.

- ·At 3:00 PM on May 3, 2024, CINTEL and CINTEL IEI Student Chapter had an inspirational technical conversation. The famous graduate Mr. Vinay Upadhyay talked on "How to Crack Placement and Get an Offer in a Marquee Company." Dr. Suresh planned the session to show the department's commitment to student success. Mr. Vinay Upadhyay advised on securing top positions with his industry skills and success. He stressed resume writing, interviewing, and preparation. His talk was motivational and full of practical advice and personal experiences. Students had better job prospects and a more welcoming learning atmosphere.

- The Alumni Achiever Connect session titled "Career Kickstart: Navigating the Journey from College to Workforce" was an insightful and engaging event. The talk provided attendees with valuable guidance on key objectives of certification courses and essential tips for preparing for marquee, dream, and super dream companies. Additionally, the session offered practical advice on crafting an effective resume, strategies for cracking placements, and crucial tips for debugging code and mastering programming languages, equipping students with the tools needed to succeed in their career paths.



MEET THE TEAM OF COLOSSAL

PRESIDENT

Aayushman Ghatak

VICE PRESIDENT

Bidipta Biswas

WEB MASTER

Yahya Saad Vanekar

Adikhya Sharma
CONTENT DIRECTOR

Anoorag Kargupta
GRAPHICS DIRECTOR

அருமை உடைத்தென் றசாவாமை வேண்டும்
பெருமை முயற்சி தரும்.

Say not, 'Tis hard', in weak, desponding hour,
For strenuous effort gives prevailing power.

இச்செயலை நம்மாலே செய்ய முடியாதென்று தளர்ச்சி கொள்ளாமல் இருக்கவேண்டும்; இடைவிடாத முயற்சியானது அதனைச் செய்து முடிக்கும் வலிமையைத் தரும்.

Yield not to the feebleness which says, "this is too difficult to be done"; labour will give the greatness (of mind) which is necessary.