अमृता विश्व विद्यापीठम् Amrita Vishwa Vidyapeetham

Coimbatore

(Accredited by NAAC with 'A++' grade)





A Two-week Hybrid Faculty Development Program

on

Recent Advances and Challenges in Artificial Intelligence, Machine Learning & Blockchain Technology (RACAMBT – 2023) 27th February – 10th March 2023



Patron

Dr. Sasangan Ramanathan Dean – School of Engineering Amrita Vishwa Vidyapeetham Coimbatore

ABOUT AMRITA VISHWA VIDYAPEETHAM

Amrita Vishwa Vidyapeetham is a multi-campus, multidisciplinary research academia accredited with an 'A++' rating by NAAC and is ranked among the best research institutions in India.

It was founded by the world-renowned humanitarian, Sri Mata Amritanandamayi Devi, to provide rigorous academic instruction in an environment rooted in Indian cultural heritage. Our vision is to be an exemplary institution that thrives on its commitment to the transformative power of value-based education, providing the impetus to develop the expansiveness to harmonize both scientific knowledge and spiritual understanding, to utilize knowledge for societal benefit and contribute to a prosperous and sustainable future for all.

ABOUT THE CENTER

The TIFAC-CORE in Cyber Security at Amrita Vishwa Vidyapeetham was established in 2005. It was identified by TIFAC, the Department of Science & Technology of the Government of India, as a CORE in Cyber Security. The center's unique aspect is the collaboration between industry and academia to develop innovative educational and research programs and world-class expertise in cybersecurity. Currently, the center offers a B.Tech in Computer Science (Cyber Security) and an M.Tech in Cyber Security. The department also offers PhD programs in Cyber Security, including cryptography, network security, blockchain technology, and more.

THEME OF THE FDP

This FDP program aims to improve the skills and knowledge of faculty members, research scholars, and industry professionals in areas such as Artificial Intelligence (AI), Machine Learning (ML), and Blockchain Technology. It provides participants with the opportunity to learn about emerging technologies and the challenges in these fields. It offers a hands-on demonstration of AI & ML algorithms for real-world applications, smart contract development and security challenges in these areas. A Two-week Hybrid Faculty Development Program

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AICTE Training and Learning (ATAL) Academy



Organised by

TIFAC-CORE in Cyber Security Amrita Vishwa Vidyapeetham (AVV) Coimbatore

Coordinator

Dr. Prashant R Nair, CSE, AVV, Coimbatore

Co-Coordinator

Mr. Ramaguru Radhakrishnan, TIFAC-CORE in Cyber Security, AVV, Coimbatore

KEY POINTS

- Keynote speeches by professors from IITs and NITs, and industry experts.
- Exposure to recent advancements and challenges in AI, ML, DL, and Blockchain Technology.
- In-depth discussions covering topics from basic to advanced levels, including expert systems in AI, ML tools and techniques, and blockchain integration with AI and ML.
- Demonstrations of AI, ML, and DL algorithms for real-world applications.
- Hands-on sessions for developing smart contracts and decentralized applications.
- Discussion of the security aspects of AI, ML, and Blockchain smart contracts.
- Exploration of trends beyond AI and blockchain technologies, and an understanding of open problems and challenges.

Who Should Attend?

- Academicians, Research Scholars, and PG Students in Computer Science Engineering, Cyber Security, Blockchain Technology, Internet of Things and AI.
- Industry Practitioners engaged in research in relevant areas.

Number of Seats (Maximum): 50 (First Come Basis)

Registration Fee: Nil

Test & e-Certificate

- The coordinator will administer a final exam at the end of the faculty development program.
- An e-certificate will be issued to participants who have attended the program with a minimum of 80% attendance and scored a minimum of 60% on the final exam.

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REGISTRATION DETAILS

The participants are advised to apply online through AICTE ATAL registration portal on or before 14th Feb 2023: <u>https://atalacademy.aicte-india.org/signup</u>



CONTACT DETAILS

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STUDENT COORDINATORS

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Ms. Pothuri Lakshmi Harika Phone: +91 70321 36890

RESOURCE PERSONS

Dr. Vasily Sachney, The Catholic Univ. of Korea Dr. Mayank Agarwal, IIT Patna Dr. Vasudevan A R. NIT Calicut Dr. Sangeetha V, BITS Pilani, Bengaluru Prof. Avishek Adhikari, Presidency Univ., Kolkata Prof. Jubilant J Kizhakkethottam, Saingits College Dr. Anoop V S, Digital University Kerala Dr. Sivagami R, AVV, Coimbatore Prof. Amit Agarwal, AVV, Coimbatore Mr. Vigneswaran R, R & I Group, TCS Mr. Maharaj M, Founder & CEO, BCBUZZ Tech. Mr. Venkata Sai Charan Putrevu, IIT Kanpur Mr. Alex Neelankavil Devassy, Ernst & Young Ms. Gandavaram Anuhya, Param Networks Mr. Sivadanam Yaswanth Lingam, Groww India Mr. Aju Mathew Thomas, Ernst & Young

ORGANIZING COMMITTEE

Convener

Prof. M. Sethumadhavan, AVV, Coimbatore Coordinator

Dr. Prashant R Nair, CSE, AVV, Coimbatore Co-Coordinator

Mr. Ramaguru Radhakrishnan, CYS, AVV, Coimbatore

Advisory Committee

Prof. Bharat Jayaraman, AVV, Coimbatore Mr. Sitaram Chamarty, TCS

Organizing Committee

Dr. Amritha P P, CYS, AVV, Coimbatore Dr. Praveen K, CYS, AVV, Coimbatore Dr. Lakshmy K V, CYS, AVV, Coimbatore Dr. Chungath Srinivasan, CYS, AVV, Coimbatore

Recent Advances and Challenges in Artificial Intelligence, Machine Learning & Blockchain Technology (RACAMBT – 2023)

Online Session: 27th February – 4th March 2023

Time	7:00 to 7:50 PM	8:00 to 8:50 PM		
Day 1 27th Feb Monday	Mr. Venkata Sai Charan Putrevu PMRF Research Scholar, IIT Kanpur A Threat Model for Target-Specific APT Attacks – Misusing ML Services (D)	Dr. Vasudevan A R Assistant Professor, NIT Calicut Machine Learning and Intrusion Detection System		
Day 2 28th Feb Tuesday	Prof. Avishek Adhikari Head of Dept., Presidency University, Kolkata Public Key Cryptography and its Applications in Blockchain Technology	Ms. Gandavaram Anuhya Blockchain Developer, Param Networks, Bengaluru Blockchain Technology and Cryptocurrency (D)		
Day 3 1st Mar Wednesday	Dr. Vasily Sachnev Associate Professor, The Catholic University of Korea A New Approach for JPEG Steganalysis with a Cognitive Evolving Ensembler and Robust Feature Selection	Dr. Sivagami R Research Associate, Amrita Vishwa Vidyapeetham, Coimbatore A Deep Dive into Convolutional and Recurrent Neural Networks in Deep Learning (D)		
Day 4 <mark>2nd Mar</mark> Thursday	Dr. Mayank Agarwal Assistant Professor, Dept. of CSE, IIT Patna 802.11 Wireless Vulnerabilities, Concepts and Exploits (D)			
Day 5 3rd Mar Friday	Prof. Jubilant J Kizhakkethottam Lead - Blockchain Lab, Saintgits College of Engineering, Kottayam Blockchain Implementations in IoT for Supply Chain Management (D)			
Day 6 <mark>4th Mar</mark> Saturday	Dr. Anoop V S Research Officer, School of Digital Sciences, Digital University Kerala, Thiruvananthapuram Natural Language Processing for Improving Public Health	Research Officer, School of Digital Sciences, Digital University Kerala, Thiruvananthapuram		

Recent Advances and Challenges in Artificial Intelligence, Machine Learning & Blockchain Technology (RACAMBT – 2023)

Offline Session: 6th March – 10th March 2023

Time Slot	9:30 AM to 12:00 PM (Forenoon)	12:00 to 1:00 PM	1:00 to 2:00 PM	2:00 to 4:30 PM (Afternoon)
Day 7 6th Mar Monday	Mr. Maharaj M Founder and CEO, BCBUZZ Technologies, Coimbatore Recent Challenges in Enterprise Blockchain Projects	Article 1 Discussion	FUNCH	Dr. Sivagami R Research Associate, Amrita Vishwa Vidyapeetham Image Analysis using Deep Learning Techniques (P)
Day 8 7th Mar Tuesday	Mr. Ramaguru Radhakrishnan Assistant Professor, Amrita Vishwa Vidyapeetham, Coimbatore Smart Contract Implementation using Solidity (P)	Article 2 Discussion		Mr. Vigneswaran R Consultant, Cybersecurity and Privacy Research &Innovation Group, TCS Smart Contract Security Auditing (P)
Day 9 <mark>8th Mar</mark> Wednesday	Mr. Alex Neelankavil Devassy Senior Security Consultant, Ernst & Young, Thiruvananthapuram Blockchain Application Security (P)	Article 3 Discussion		Dr. Sangeetha V Asst. Professor (Gr-I), BITS, Pilani - WILP (Division), Bengaluru Securing AI Models: A Case Study on ChatGPT (D)
Day 10 9th Mar Thursday	Mr. Sivadanam Yaswanth Lingam Cyber Security Analyst, Groww, Bengaluru Implications of GDPR on Blockchain Technology (D)	Article 4 Discussion		Prof. Amit Agarwal Dept. of EEE, Amrita Vishwa Vidyapeetham, Coimbatore Challenges in Adopting Blockchain Technology
Day 11 <mark>10th Mar</mark> Friday	Project Charter	Assessments		Reflection Journal

P - Practical Session, **D** - Demo Session