

Multidisciplinary Perspectives in Advanced Computing and Technology

Editor:

Dr. Ashok Kumar

Mr. Avinash Reddy Pothu

Mr. Harish Apuri

Mr. Sita Rama Praveen Madugukla

Mr. Mia Md. Tofayel Gonee Manik

**International Conference on Multidisciplinary
Perspectives in Advanced Computing and
Technology (IMPACT-2026)**

Organized by

**Department of IT, G.B. Pant University of Agriculture
and Technology, Pantnagar, Uttarakhand, India**

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EDITED BY

Dr. Ashok Kumar

Assistant Professor, Department of Information Technology,
College of Technology, G.B. Pant University of Agriculture and Technology,
Pantnagar, Uttarakhand, India

Mr. Avinash Reddy Pothu

Chief Product Architect, Ginger Security Labs, Frisco, TX, USA

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Software Engineer, IT Induct INC, Charlotte, NC, USA

Mr. Sita Rama Praveen Madugukla

Technology Leader – Risk and Finance, Techno Tasks Inc, USA

Mr. Mia Md. Tofayel Gonee Manik

Department of IT (Data Science & AI), University of the Cumberlands, Kentucky, USA

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GBPUAT at a Glance

After independence, development of the rural sector was considered the primary concern of the Government of India. In 1949, with the appointment of the Radhakrishnan University Education Commission, imparting of agricultural education through the setting up of rural universities became the focal point. Later, in 1954 an Indo-American team led by Dr. K.R. Damle, the Vice-President of ICAR, was constituted that arrived at the idea of establishing a Rural University on the land-grant pattern of USA. As a consequence a contract between the Government of India, the Technical Cooperation Mission and some land-grant universities of USA, was signed to promote agricultural education in the country. The US universities included the universities of Tennessee, the Ohio State University, the Kansas State University, The University of Illinois, the Pennsylvania State University and the University of Missouri. The task of assisting Uttar Pradesh in establishing an agricultural university was assigned to the University of Illinois which signed a contract in 1959 to establish an agricultural University in the State. Dean, H.W. Hannah, of the University of Illinois prepared a blueprint for a Rural University to be set up at the Tarai State Farm in the district Nainital, UP. In the initial stage the University of Illinois also offered the services of its scientists and teachers. Thus, in 1960, the first agricultural university of India, UP Agricultural University, came into being by an Act of legislation, UP Act XI-V of 1958. The Act was later amended under UP Universities Re-enactment and Amendment Act 1972 and the University was rechristened as Govind Ballabh Pant University of Agriculture and Technology keeping in view the contributions of Pt. Govind Ballabh Pant, the then Chief Minister of UP. The University was dedicated to the Nation by the first Prime Minister of India Pt. Jawaharlal Nehru on 17 November 1960.

The College of Technology came in to existence in this prestigious university in 1966 and College of Agricultural Engineering was merged in to it. Its ten departments offer eight B. Tech Degree Programs namely Agricultural Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics & Communication, Information Technology, Mechanical Engineering and Production Engineering. In addition to it, the College offers post graduate and PhD programs also. The College of Technology, an ISO 9001:2000 certified institution, is privileged to have a well qualified and experienced faculty with judicious mix of creative, talented and committed academicians. A large number of faculty members hold Ph.D. degree in their respective fields from national and international institutions of repute.

Research excellence is a defining strength of the department. Faculty and students actively contribute to multidisciplinary work across Data Science, Cyber Security, AI and Bioinformatics, often in collaboration with national agencies and industry partners. This research ecosystem supports the development of advanced computational tools and practical intelligent systems. With its deep focus on Computational Intelligence, Cyber Security, IoT and Agri-Tech, the Department of Information Technology at GBPUA&T continues to drive innovation at the intersection of technology and agriculture. Through its research initiatives, industry collaborations and student-centric academic environment, the department today stands as a hub of excellence nurturing technologists, researchers and innovators equipped to meet the evolving demands of the digital world.

Patron Message



It is my privilege to extend a warm and heartfelt welcome to all delegates, scholars, innovators and industry leaders joining us for International Conference on Multidisciplinary Perspectives in Advanced Computing and Technology (IMPACT-2026). On behalf of the organising community, I am honoured to host this distinguished gathering of diverse academic and professional minds.

We stand at a pivotal point in history where rapid technological advancements are reshaping industries, societies and global priorities. As computing converges with engineering, sciences, agriculture, management and the humanities, new possibilities emerge that extend far beyond traditional boundaries. IMPACT-2026 serves as a dynamic platform for exchanging breakthrough ideas, sharing research excellence and exploring cross-disciplinary

solutions that address the world's most pressing challenges.

The breadth of contributions represented in this conference from Information Technology, Computer Science & Engineering, Electronics & Communication, Mechanical and Electrical Engineering, to Agriculture, Fisheries, Veterinary Science, Community Science, Basic Science, Management and the Humanities reflects the spirit of multidimensional inquiry that defines future-ready innovation. This is a space where diverse expertise meets curiosity and where collaborative thinking ignites transformative progress.

As we engage in thoughtful discussions, visionary presentations and meaningful interactions, I encourage every participant to embrace openness, experimentation and purposeful dialogue. Let this forum inspire new partnerships, strengthen research communities and spark ideas that transcend disciplinary silos. True innovation emerges when knowledge systems intersect, perspectives broaden and technology is guided by responsibility, inclusivity and a collective commitment to societal well-being.

I extend my sincere appreciation to the organizing committee, distinguished speakers, session chairs and contributors. Your dedication, passion and collaborative efforts have been instrumental in making IMPACT-2026 a reality.

As we embark on this shared journey, may this conference be a catalyst for inspiration, interdisciplinary synergy and innovations that shape a brighter and more sustainable future. I wish you all an engaging, enriching and memorable experience at IMPACT-2026.

A handwritten signature in blue ink, reading "M. Chauhan". The signature is fluid and cursive, with a horizontal line underneath.

Dr. Manmohan Singh Chauhan

Patron, IMPACT-2026

Hon'ble Vice-Chancellor, G.B. Pant University of Agriculture & Technology, Pantnagar

General Chair Message



On behalf of the organising institutions, I am pleased and deeply honoured to extend a warm and enthusiastic welcome to the International Conference on Multidisciplinary Perspectives in Advanced Computing and Technology (IMPACT-2026). This premier global gathering reflects our commitment to fostering academic excellence, scientific inquiry and transformative innovation across diverse domains.

IMPACT-2026 brings together an extraordinary spectrum of disciplines ranging from Information Technology, Computer Science & Engineering, Electronics, Electrical and Mechanical Engineering to Agriculture, Basic and Community Sciences, Fisheries, Veterinary Science, Management, Humanities and Library Sciences. Such a broad and inclusive academic canvas embodies the true spirit of modern research, where real breakthroughs occur at the intersection of ideas, perspectives and practices.

This conference provides opportunity for meaningful progress through curiosity and collaboration. IMPACT-2026 provides a unique platform for scholars, researchers, innovators and industry leaders to exchange insights, challenge established paradigms and co-create new pathways for advancement in advanced computing and technology.

As the world experiences rapid digital transformation and unprecedented technological convergence, the conversations held here are not merely academic they are essential catalysts for shaping a more intelligent, resilient and inclusive future. The success of this conference is built on the dedication and hard work of the organizing team as well as the invaluable contributions of distinguished speakers, researchers, reviewers and delegates. I extend my heartfelt appreciation for their unwavering support, academic rigor and forward-looking vision that have made IMPACT-2026 a hallmark event of scholarly excellence.

My sincere congratulations to everyone involved in bringing this conference to life. The ideas, discussions and partnerships formed over these two days may inspire new collaborations, strengthen knowledge networks and lead to innovations that benefit society as a whole.

With warmest wishes for an enriching and transformative experience let us learn boldly, collaborate meaningfully and shape a future filled with multidisciplinary possibilities.

A handwritten signature in blue ink, appearing to read 'S.S. Gupta', with a long horizontal stroke extending to the right.

Prof. (Dr.) S.S. Gupta

General Chair, IMPACT-2026

Dean, College of Technology, Govind Ballabh Pant University of Agriculture and Technology,
Pantnagar, Uttarakhand, India

General Chair Message



It is a matter of great honor to welcome you all to the International Conference on Multidisciplinary Perspectives in Advanced Computing and Technology (IMPACT-2026), scheduled to be held on January 10–11, 2026. This distinguished forum brings together leading scholars, researchers, innovators and industry professionals from a remarkably broad spectrum of disciplines spanning science, engineering, technology and applied fields.

In an era where technological innovation intersects dynamically with societal progress, multidisciplinary perspectives have become indispensable. Fields such as Information Technology, Computer Science & Engineering, Electronics & Communication, Electrical and Mechanical Engineering, Civil and

Production Engineering, Agriculture and Basic Sciences, Community and Fisheries Sciences, Veterinary Science, Management, Library Science and Humanities are increasingly interconnected. The fusion of these diverse domains is driving holistic solutions to global challenges, fostering sustainable development and shaping the next frontier of research and innovation.

IMPACT-2026 is envisioned as a premier platform for meaningful intellectual exchange, where experts from diverse disciplines come together to present groundbreaking research, share transformative experiences and explore emerging technologies from complementary perspectives. By bridging traditional academic silos, the conference fosters collaborative problem-solving, cross-domain innovation and a deeper understanding of how technology can benefit society as a whole.

As an institution committed to advancing knowledge and nurturing future-ready talent, we firmly believe in cultivating an environment where ideas transcend boundaries and research translates into impactful real-world applications. Conferences like IMPACT-2026 embody this spirit by encouraging participants to think broadly, collaborate widely and innovate boldly.

I extend my heartfelt appreciation to all keynote speakers, authors, reviewers, participants and sponsors for their invaluable contributions in bringing this conference to fruition. I encourage each delegate to engage wholeheartedly in discussions, build meaningful networks and carry forward the momentum of interdisciplinary collaboration beyond the conference.

Together, let us use this platform to inspire new perspectives, strengthen academic and industry partnerships and pave the way toward a technologically advanced, inclusive and sustainable future.

A handwritten signature in blue ink, appearing to read 'Prabhat Kumar', with a long horizontal flourish extending to the right.

Prof. (Dr.) Prabhat Kumar

General Chair, IMPACT-2026

Dean (SW), National Institute of Technology Patna, Bihar, India

Conference Chair Message



It gives me immense pleasure to welcome all distinguished delegates to International Conference on Multidisciplinary Perspectives in Advanced Computing and Technology (IMPACT-2026), to be held on January 10–11, 2026. This conference stands as a vibrant confluence of scholars, researchers, practitioners and innovators representing a broad range of disciplines across science, engineering, technology and related fields.

Today's world is witnessing unprecedented convergence between technological advancements and societal needs. The integration of domains such as Information Technology, Computer Science & Engineering, Electronics & Communication, Electrical and Mechanical Engineering, Civil and Production Engineering, Agriculture and Basic Sciences, Community and Fisheries Sciences, Veterinary Science, Management, Library Science and the Human-

ities highlights the importance of interdisciplinary collaboration. It is through such synergy that we can develop holistic solutions, foster sustainable innovation and address the complex challenges of the modern era.

IMPACT-2026 aspires to serve as a dynamic platform where diverse perspectives merge to spark new ideas, catalyze impactful research and inspire collaborative ventures. By bringing together experts from varied academic and professional backgrounds, the conference encourages the reimagining of traditional boundaries and promotes a culture of shared learning and cross-disciplinary exploration.

As an institution dedicated to academic excellence and societal progress, we firmly believe that knowledge grows stronger when disciplines interact. This conference reflects our commitment to nurturing a research ecosystem where creativity, critical thinking and technological innovation thrive hand in hand.

I express my sincere appreciation to all keynote speakers, contributors, reviewers, participants and Faculty of Information Technology Department for their unwavering support and enthusiastic involvement. I invite each delegate to immerse themselves in the sessions, engage in rich discussions and build meaningful collaborations that extend well beyond these two days.

Let us work together to harness the power of multidisciplinary thinking and collectively shape a future that is innovative, inclusive and transformative.



Dr. Rajeev Singh

Conference Chair, IMPACT-2026

Professor (Computer Engineering) & Head IT

Govind Ballabh Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India

Convener Message



It is a privilege to extend a warm welcome to all participants of the International Conference on Multidisciplinary Perspectives in Advanced Computing and Technology (IMPACT-2026), scheduled on January 10–11, 2026. This conference represents an exceptional gathering of thinkers and professionals from a diverse range of academic and scientific disciplines.

The rapid advancement of technology has created a landscape where boundaries between disciplines are increasingly fluid. Fields such as Information Technology, Computer Science & Engineering, Electronics & Communication, Electrical and Mechanical Engineering, Civil and Production Engineering, Agricultural and Basic Sciences, Community and Fisheries Sciences, Veterinary Science, Management, Library Science and the Humanities are

now intertwined through shared challenges and collaborative opportunities. This interconnectedness underscores the need for dialogues that draw from multiple perspectives and expertise.

IMPACT-2026 aims to provide such a space, an inclusive forum where diverse voices contribute to meaningful discussions on advanced computing, emerging technologies and their societal implications. By facilitating the exchange of innovative research, practical insights and forward-looking ideas, the conference aspires to inspire new collaborations and drive impactful advancements across disciplines.

Our institution remains committed to promoting academic excellence and fostering a culture that values creativity, inquiry and interdisciplinary engagement. This conference reflects that commitment by encouraging participants to explore new possibilities, question established approaches and envision solutions that extend beyond conventional boundaries.

I express my heartfelt gratitude to the keynote speakers, authors, reviewers, organizers, participants and sponsors whose dedication has made this event possible. I encourage all attendees to actively participate in the sessions, share their expertise and form connections that will continue to flourish after the conclusion of the conference.

May IMPACT-2026 serve as a catalyst for new insights, strengthened partnerships and a future shaped by innovation, collaboration and sustainable progress.

A handwritten signature in blue ink, appearing to be 'Ashok Kumar', with a stylized flourish at the end.

Dr. Ashok Kumar

Convener, IMPACT-2026

Department of IT, G.B. Pant University of Agriculture and Technology,
Pantnagar, Uttarakhand, India

Foreword



It gives me great pleasure to share a few words on the occasion of IMPACT-2026, the International Conference on Multidisciplinary Perspectives in Advanced Computing and Technology. This prestigious event brings together experts, researchers and practitioners from a wide range of disciplines, including information technology, computer science, engineering, basic sciences, agriculture, community sciences, management and humanities. By creating a common platform for these diverse domains, the conference encourages meaningful academic exchange and cross-disciplinary collaboration.

Scheduled for January 10 and 11, 2026, IMPACT-2026 aims to serve as a rich forum for discussing pioneering ideas, emerging trends and real-world applications. The rapid growth of technology and its deepening influence on society make such conversations both valuable and timely. The interaction among participants will foster new relationships and inspire innovative thinking that bridges the gap between research and practice.

With this context, I would like to extend warm appreciation to the organizers of IMPACT-2026, hosted by the Department of Information Technology, College of Technology, G. B. Pant University of Agriculture and Technology, Uttarakhand, India. The summit offers a remarkable space for high-quality research contributions from globally recognized institutions. Through its focus on the responsible and sustainable development of artificial intelligence and emerging technologies, it demonstrates the positive outcomes of collective scientific effort.

Events like these underscore the importance of shared knowledge in driving progress. They remind us to approach innovation thoughtfully, ensuring that its benefits reach society in an inclusive manner. Ideas exchanged in these gatherings will shape the future, open new avenues for research, and strengthen collaboration among different disciplines.

I extend my sincere wishes for the continued success of IMPACT-2026. I look forward to the fruitful discussions, inspiring exchanges and lasting partnerships that this conference will generate.

Sincerely,

Prof. Krishna Nemali
Horticulture & Landscape Architecture
Perdue University,
625 Agricultural mall Drive, West Lafayette, Indiana, USA 47907
e-mail: knemali@purdue.edu
Phone: (765) 494-8179, Fax: (765) 494-0391

Foreword

Dear All

The IMPACT-2026 Conference marks an important milestone in advancing knowledge and innovation across multiple domains of science and engineering. As technology continues to redefine the way we live, work and communicate, this event brings together distinguished researchers, academicians and professionals to address key challenges and explore emerging opportunities.

The theme of IMPACT-2026 reflects the global shift toward integrated research and development. By providing a scholarly avenue for the exchange of ideas, the conference encourages collaborations that bridge diverse disciplines such as Information Technology, Computer Science and Engineering, Electronics and Communication, Electrical Engineering, Mechanical Engineering, Production Engineering, Civil Engineering, Agriculture Science, Basic Science, Community Science, Fisheries Science, Veterinary Science, Management, Library Science and Humanities. This multidisciplinary approach highlights the importance of integrating theory, practice and innovation to make a meaningful contribution to society.

I express my sincere appreciation to the organizing committee for their sustained efforts, vision and dedication in bringing this conference to fruition. Their commitment to academic excellence, research quality and professional leadership stands as a source of inspiration for the wider community.

I extend my warm wishes for the successful conduct of IMPACT-2026 and hope that the discussions, deliberations and outcomes emerging from this event will pave the way for continued progress in research and technology development.

Warm Regards

Dr. Loredana-Mihaela STANCIU
Director CCOC
Politehnica University Timisoara,
2 Victory Square, 300006 Timisoara, Romania
Email: loredana.stanciu@upt.ro

Distinguished Keynote Speakers



Dr. Tina Tomažič is a Faculty member in the Department of Media Communication at the University of Maribor, at the Faculty of Electrical Engineering and Computer Science. She graduated from the Faculty of Economics and Business and earned, in the Marketing field, an MSc in Economics and Business Sciences at the University of Maribor. She earned a PhD at the Philosophical Faculty in Information and Communication Science in Zagreb, Croatia. In the academic year 2007/08, she worked in Croatian Studies at the University of Zagreb, Department of Communication, in Croatia. She participated actively in international conferences, round tables and projects during her work. She published several scientific and professional articles in significant international journals. She has been a guest lecturer at the University of Porto (Portugal) and the University of Zurich (Switzerland). She is a member of the Editorial Board and a reviewer in some established international scientific journals. Her main research interests are: Marketing, Psychology of Visual Communication, Media Communication, Strategic Communication, Product placement, Public Relations.



Prof. (Dr.) Bhuwan Joshi is Professor at Udaipur Solar Observatory (USO) of Physical Research Laboratory (PRL), Ahmedabad. Currently, he is also serving as a Deputy Head of USO. He received his M.Sc. from Kumaun University (2000). Subsequent, he joined the Aryabhata Research Institute of Observational Sciences (ARIES) as Research Fellow and obtained PhD in 2007. He has worked at Korea Astronomy and Space Science Institute (KASI) as a Postdoctoral Fellow during 2007-2008. He joined Udaipur Solar Observatory in 2008 as a scientist. Dr. Joshi's primary research field is Solar and Space Physics. His research activities encompass understanding the transient activity of our star, the Sun, and its influence on interplanetary medium and near-Earth environment.

During 2014-2015, he was awarded Research Professorship at South Korea's Kyung Research, Kyung Hee University. He has received research fellowships from prestigious bilateral programmes including DAAD-Germany, OeAD-Austria. He has widely travelled to several countries for invited talks and collaborative research programs including USA, Austria, South Korea, France, Germany, Poland, Belgium, Portugal, Russia, South Korea, Singapore, Turkey, and Japan.

Dr. Joshi is contributing toward the development of ISRO's programs for solar exploration. He is a member of Aditya-L1 Science Working Group (ASWG), Science Lead and Co-I on HELIOS/Aditya-L1, Member of Science Team on XSM/Chandrayaan-2. Dr. Joshi has initiated program for solar radio observations at USO-PRL in October 2018.

Dr. Joshi has published over 70 research papers in peer-reviews journals and successfully supervised 5 PhD students. He has also supervised postdoctoral fellows and many M.Sc./M.Tech students including international scholars under UN sponsored CSSTEAP program.



Prof. (Dr.) Thipendra P Singh is a Professor of Artificial Intelligence at Chandigarh University, Uttar Pradesh, India. At present he is also holding the position of founding Pro Vice Chancellor there. Prior to this, he was associated with Bennett University, Greater Noida as Dean Academic Affairs, University of Petroleum & Energy Studies, Dehradun, Uttarakhand, India as Professor and Head of Department at School of Computer Science and Sharda University, Greater Noida, India. Dr. Singh is also paneled as adjunct professor at School of Computing at Maryam Abacha American University of Nigeria. Dr. Singh earned double master's Degrees, once in Computer Applications (1996) while another in Computer Science & Engineering (2009) with very high grades. Further, he went on pursuing his Doctorate in Computer Science from prestigious Jamia Millia Islamia University, New Delhi. He carries more than 29 years of rich experience with him which includes industry and academia both. He started his career with Tata Group as programmer and then joined academics in year 2000. His research interests include machine intelligence, pattern recognition and development of hybrid intelligent systems. He was instrumental in setting up the Centre of Excellence in Smart Healthcare at Bennett University which is a multidisciplinary center of research on healthcare. Four research scholars have completed their PhDs and currently 06 others are working towards their Doctoral degree under him. Out of the four, one scholar was jointly supervised with a French university. He has been a widely travelled academician and participated at various platforms across the countries, including UK, France, Malta, Italy, UAE and Singapore. There are more than 120 publications to his credit in various National and International journals. He has been author/editor of more than 20 books on various allied topics of Computer Science. Few interesting books of him include wide applications of AI in various domains including agriculture, healthcare and media. Dr. Singh holds prestigious fellowship of IEI. Beyond this he is also a senior member of IEEE and member of various other professional bodies including ACM, EAI, ISTE, IAENG etc. and also on the editorial/reviewer panel of different journals published by reputed publication houses like Elsevier, Springer, InderScience etc. He is also Fellow of IETA-India since 2019. He has been associated with many conferences throughout India and abroad as Keynote Speaker, Chair, Organizing Committee member, TPC member and Session Chair etc.



Prof. (Dr.) Manju Khari is Dean and Professor in the School of Computer and Systems Sciences at Jawaharlal Nehru University (JNU), New Delhi and a leading researcher in software engineering and information security. She holds a Ph.D. in Computer Science and Engineering from the National Institute of Technology Patna and an M.Tech in Information Security from the AIACT&R, Delhi. With over 17 years of academic and research experience, her work spans software testing, software quality assurance, software metrics, nature-inspired optimization, artificial intelligence, IoT security and cyber forensics. Prof. Khari has authored numerous research papers, edited books and book chapters and has made extensive contributions to national and international conferences. She has also served in several editorial and reviewer roles for reputed journals and publishing houses. Her academic leadership at JNU and her sustained contributions to emerging areas of secure and intelligent computing make her a highly respected figure in the global research community.



Prof. (Dr.) Kavita Sharma is Deputy Dean of R&D Cell and Professor in the Department of Computer Science and Engineering at Galgotias College of Engineering & Technology, Greater Noida, India. She earned her Ph.D. in Computer Engineering from the National Institute of Technology, Kurukshetra (an Institution of National Importance), India. Before her doctoral studies, she completed her M.Tech. in Information Security from GGSIPU, Delhi and her B.Tech. in Information Technology from UPTU, Lucknow. She was also awarded a prestigious research fellowship by MEITY, Government of India.

Dr. Sharma has extensive experience in both academia and research. She holds six patents (one granted and five published), one granted design, has authored 11 books and has published 62 research papers in reputed international journals and conferences. She has served as Section Editor of Scalable Computing: Practice and Experience (SCPE) and continues to contribute to several other reputed journals as a guest editor, editorial board member and international advisory board member.

She has been invited to deliver guest lectures at international conferences and faculty development programs and currently serves as a reviewer for leading journals published by IEEE, Springer, Inderscience and Wiley, among others. She is a Senior Member of IEEE, a Professional Member of ACM and a Life Member of DMPedia, CSI, ISTE, IAENG and the Institute of Nanotechnology. She is also a member of SDIWC, the Internet Society, IACSIT, CSTA and IAEOE. Prof. Sharma has actively organized and participated in several international conferences, faculty development programs and national as well as international workshops. Her research interests include Information and Cyber Security, Mobile Computing, IoT Security, Data Analytics and Machine Learning.



Dr. Loredana-Mihaela STANCIU is a member of the Automation and Applied Informatics Department of the Politehnica University Timisoara, currently being an Associate Professor since 2001. She graduated from Computer Science and Automation Faculty, part of the Politehnica University Timisoara, in 2001. She received her PhD in Biomedical Engineering from Politehnica University Timisoara in 2008. She also got her bachelor's degree in psychology at the West University Timisoara in 2020. She has interests in areas such as artificial intelligence,

neural networks, social networks, affective computing and game development. She has research in emotional state recognition based on facial features interpretation using image processing, serious games controlled by gesture recognition, serious games as additional psychological support. Currently she is also Director of Counselling and Career Guiding Centre, which offers to university students career counselling, psychological counselling, vocational and psychological profile, workshops on mental health and personal development, biannual job fair where the students get in touch with companies, potential employers.



Mr. Kathiresan Jayabalan is a Senior Software Quality Engineering Leader at Mastercard Technologies, USA, where he drives enterprise workflow automation and quality engineering for large-scale commercial card platforms and digital payment systems. An accomplished researcher and innovator, he brings over 15 years of technical leadership in software quality engineering, AI, machine learning and cloud engineering to deliver resilient, high-performance systems that support critical payment operations across global markets. A published author, peer reviewer and patent holder, he has pioneered automation frameworks that have significantly enhanced testing efficiency and product reliability. Recognized with the QA Star Award for his exceptional contributions, he is frequently invited to share his expert insights at international technology conferences. He holds distinguished professional honors as a Senior Member of the IEEE and a Fellow of both BCS and IETE. He is also advancing his Ph.D. research in AI and deep learning algorithms. Based in St. Louis, USA, he is committed to advancing software quality through innovation, thought leadership and the application of emerging technologies.



Mr. Chaitanya Tumma is a seasoned technology leader with more than a decade of experience in the IT industry, specializing in enterprise systems, cloud engineering, AI-driven automation and secure digital payment technologies. He serves as a Senior Systems Applications Analyst (Lead) at Visa Inc., USA, where he plays a key role in supporting mission-critical digital platforms, driving automation strategies and ensuring the reliability of large-scale production environments. He is currently pursuing his Ph.D. in Information Technology at the University of the Cumberland, Kentucky, with academic interests centered on Artificial Intelligence, Machine Learning, Blockchain and Cybersecurity. His research explores the development of intelligent, secure and scalable digital ecosystems designed for next-generation computing environments.

Throughout his career, Chaitanya has led complex technical operations and collaborated extensively with global engineering and product teams. He has been instrumental in integrating AI into operational workflows, advancing cloud optimization efforts and improving the resilience of digital payment systems.

Chaitanya holds a Master's degree in Applied Computer Science from Northwest Missouri State University and a Bachelor's degree in Computer Science Engineering from JNTU, India. He is also certified in ITIL 4, Splunk and AWS, further demonstrating his commitment to technical excellence and continuous skill development.

Beyond his industry work, Chaitanya is an active researcher and contributor to the global technology community. His interests span advanced AI models, intelligent optimization techniques, cloud-native architectures and cybersecurity-driven system design. He frequently collaborates with academic peers, participates as a reviewer for international conferences and contributes to emerging discussions in intelligent automation and secure distributed computing.

Passionate about knowledge sharing and community advancement, Chaitanya engages in speaking forums, mentorship activities and industry-academia initiatives aimed at empowering the next generation of innovators. His multidisciplinary expertise and forward-looking approach to AI and digital transformation make him a compelling and insightful keynote speaker.



Mr. Raghavender Reddy Puchhakayala is a seasoned data and analytics leader with over a decade of experience in Business Intelligence (BI), Data Warehousing and Analytics across banking, healthcare and retail domains. As an Analytics Solutions Associate Sr. at JPMorgan Chase, he drives enterprise BI transformation—leading initiatives in legacy system migration, executive dashboard development and data optimization using tools like Tableau, Jasper Reports, Cognos and PL/SQL.

Raghavender holds a Master's in Computer Science from the University of Missouri–Kansas City and is certified in Tableau, AWS, Azure, Alteryx and foundational data science. His expertise includes designing data models, modernizing reporting systems and applying AI/ML methodologies to enable data-driven decision-making and process optimization.

Recognized as a Senior Member of IEEE and Fellow of IETE, he actively contributes to the tech community through peer-reviewed publications, conference paper reviews and mentoring. His core focus areas include data analytics, business insights and intelligent automation to power strategic outcomes across organizations.