Keynote Speakers

Dr. Pradeep Kumar Sinha

Title: Advanced trends in Data Computing

Biodata: Dr. Pradeep Kumar Sinha is the Vice Chancellor & Director of International Institute of Information Technology (IIIT), Naya Raipur. Earlier he was with the Centre for Development of Advanced Computing (C-DAC), where he had led National Programs in areas of High Performance Computing (HPC), Grid Computing, and Health Informatics.

Dr. Sinha is an educationist, researcher, scientist, inventor, and internationally acclaimed author of computer textbooks, with more than twenty-five years of professional experience. He has significantly contributed to the advancement of Science & Technology and Technical Education. His technical contributions include national projects, HPC systems and facilities, healthcare products and solutions, international patents, a number of technical papers and six books in the area of Computer Science & Engineering. Books authored by him are published and marketed by several national and international publishers. Indian, American, and other Universities across the globe cite his books as textbooks for their courses. On public demand, books authored by him have been translated in local languages like Japanese and Hindi.

Dr. Sinha is a Fellow of IEEE, Fellow of Computer Society of India (CSI) and ACM Distinguished Engineer. He is also the recipient of several other awards and recognitions, including the “2011 VASVIK Research Award” and the “2013 Intel Pathfinder Award”. He has also served as the Chairman of the Executive Council of IEEE Pune Section for the year 2014 and 2015.
**Keynote Speakers**

**Madhusudan Singh**  
Research Professor at Yonsei University, South Korea

**Irish Singh**  
Research Associate at Ajou University, South Korea

**Title:** Adaptive Security for Intelligent Vehicles Technology: Perspective, Challenges and Future Trends

**Biodata (Madhusudan Singh):** Madhusudan Singh received his Bachelor and Master’s degree in computer application from Purvanchal University, Jaunpur in 2003 and UP Technical University, Lucknow in 2006, respectively. He did his M. Tech degree in IT with spec. in Software Engineering from IIIT-Allahabad, India in 2008 and Ph.D. degree in Ubiquitous IT from Dongseo University, Busan South Korea in Feb. 2012. He worked as a Senior Engineer (R&D) at Samsung Display, Ghiengkap, South Korea, from March 2012 – March 2016. Currently he is Research Professor in Yonsei Institute of Convergence Technology at Yonsei University, South Korea from June 2016. He is also Senior member of IEEE. He is the author of more than 35 research papers and 10 patents, 3 books, and he delivered multiple Invited/keynote/IEEE Webinar Talk. His research interest in the field of Automotive Cybersecurity, Blockchain Technology, Connected Vehicles, Machine Learning, and Internet of Things.

**Biodata (Irish Singh):** Irish Singh is doing Ph.D. in Computer Science and Engineering from Ajou University, Suwon, South Korea. She did her M.Tech in Computer Science and Engineering from B. Tech in Computer Science and Engineering from Birla Institute of Technology (BITS), Ranchi and B.Tech in Computer Science and Engineering from UP Technical University, Lucknow, India. Her fields of research interests are Adaptive Security, Requirement Engineering, Big Data; Cloud computing, ICN and IoT

**Abstract:** Nowadays, automotive related projects are evolving rapidly and users are shifting from local servers to community data centers. Therefore, automotive markets are desperately in need of solutions that can improve safety of driving, security of vehicles as-well-as need to reduce the cost of ownership of an automobile. In this talk, we discuss about automotive technology solutions for both safe and smart driving in personal/public vehicles. The idea is to utilize OBD-II port and Internet of vehicle’s dashboard camera to enhance the control and accident prevention/monitoring services. The proposed idea has capability to capture and share their real-time accident/traffic footage into text, audio and video forms to the related authorities such as nearest vehicles, police staff, hospital, family members and insurance company instantly along with the location. In this tutorial talk, we have categorized our tutorial into two sections. Section one, we will discuss about intelligent vehicular technologies security challenges and their possible solutions and in section two, we discuss about adaptive security for the Intelligent Vehicles.

**Motivation:** Intelligent Vehicles communicate with, within vehicles, and in three ways such as In-vehicles communication, a vehicle to infrastructure (anything) and vehicle-to-vehicle. The Intelligent Vehicle-based automotive technology has advanced network connectivity in vehicles. The industry has already started manufacturing these advanced vehicles. These vehicles have cyber-physical features. These type of vehicles collects data from physical environments and cyber systems (Connected Vehicle) make the decision and execute on such decisions within the physical environment. Some examples of such systems are Advanced Driver Assistant Systems (ADAS), Advanced Fleet Management, Smart Transportations, Autonomous driving, etc. The adaptive system evolves in a very uncertain environment; of which it is aware. It tries to fulfill a business objective by sensing
the environment, analyzing it and taking the best decision now according to its requirements. We can say that an adaptive system should make well-enough decisions, thus involving a strong notion of a trade-off between the satisfactions of the different requirements. Self-adaptive software can be aware of their architecture and thus reconfigure autonomously at runtime to activate only the required modules for a certain environment state. They can also learn from their actions through feedback loops and optimize their behavior. In the intelligent vehicles communication, data security, trust and privacy are the most significant issues. These issues are not new issues as they were also big issues during RFID, Bluetooth technologies adoption. However, the Intelligent Vehicle technologies are more secure, but a risk of attacks will reach new levels of interoperability, and the independent decision-making will begin to embed complexity, security loopholes and potential "black swan" events. This type of research needs built-in security and architectural design to protect emerging threats. To handle the vehicle communication and computing expertise, envisioned societal impact, government, agencies and vehicle manufacturers had produced international associations devoted exclusively to VANETs. Final goal of automotive security is to provide a completely secured environment for an automotive system for different operating environments. Therefore, we would like to focus more on cyber security challenges and their possible solutions for automotive industries, which can support automotive markets for smart and safe driving.
Dr Sandeep Deshmukh

**Title:** Big Data & Hadoop

**Biodata:** Dr. Sandeep Deshmukh completed his PhD from IIT Bombay and has been working in Big Data and Hadoop ecosystem for 7+ years. He has executed complex projects in different domains in a distributed computing environment. He loves teaching and interacting with people and has conducted numerous workshops on Hadoop and Apache Apex. Currently, Sandeep is a Trainer and Consultant for Big Data, Hadoop and Apache Apex.

**Academic Background**
MTech & PhD from IIT Bombay
BE from VNIT (formerly VRCE), Nagpur

**Industrial Experience**
Engineer at DataTorrent building an unified Batch and Stream processing engine
Asst. Vice President & Data Scientist at Reliance Industries Ltd.
Senior Domain Expert at Persistent Systems Ltd.
Purushottam Darshankar  
Principal Architect, Persistent System Limited

**Title:** AI & Internet of Things  

**Biodata:** An accomplished software professional having over 20+ years of experience managing clients across geographies in advanced technologies.  

- Experience in driving innovation and digital transformation engagements for Banking, Energy, Natural Resources, Oil and Gas, Utilities, Telecom, Manufacturing and Healthcare industry verticals.  
- Expertise in Human Machine Interaction, (ChatBots, AR/VR solutions), Cloud, Artificial Intelligence, IoT, Analytics, Mobile, Social (SMAC) for Digital transformation  
- Currently holding a Principal Architect position, CTO office at Persistent Systems, the responsibilities include -  
  - Provide thought leadership in HMI technology – ChatBot, AR/VR/MR solutions  
  - In house initiative in Hackathons on Mobile, AI/ML, IoT and Cloud.  
  - Create solution accelerators, reusable assets, white papers and articles to be communicated to internal and external audience
Keynote Speakers

Anushka Rajendra Shembekar

**Biodata:** She is an explorer, mentor and caretaker in "Innovation management". She has requisite experience and skills to run the innovation projects in time bound fashion resulting into desired solutions. She wish to contribute by exploring the innovative ways of solving the business problems and generating higher business value.

She is a design thinking champion and has experience of successfully completing many end to end innovation projects. She is an effective leader with more than 10 years of experience in Engineering and manufacturing organization. She believes that the information technology can boost the business only if it is aligned with the business requirements and goals.

Parallel to this, she is working as a Managing Trustee for social developments for last 9 years which has given me immense experience of handling the people with varied mindsets.

She is highly organized and efficient in fast-paced multitasking environments; able to prioritize effectively to accomplish objectives with creativity, positive attitude, strong work ethic, enthusiasm, and humor. She is a commercial and strategic thinker who has good analytical skills and superb interpersonal capabilities that allow me to communicate precisely and clearly.
**Keynote Speakers**

**Dr. Ramanujan Kashi**  
Founder member of Koopid INC

**Biodata:** Dr. Ramanujan Kashi is a founding member of a startup company, Koopid Inc and until recently a Director at Avaya Labs in Web Communications Research. He and his team contributed to Avaya's research in web real-time communications, digital ink, user authentication, collaboration and e-learning, streaming video, self-service systems, and the use of these technologies in Avaya's CRM and VoIP offers. Dr. Kashi obtained his bachelor’s in electrical engineering from Mysore University, and master’s in Biomedical Engineering and doctoral degree in Computational Neuroscience from Laboratory of Vision Research, Rutgers University in New Jersey, US. Soon after, he joined AT&T Bell Laboratories at Murray Hill in 1994 as Member of Technical Staff, transferred to Lucent Bell Labs in 1996 and subsequently, Avaya Labs Research in 2000. In 2004, he relocated to India to start a research group in multimedia at the company’s wholly-owned subsidiary, called Avaya India Private Limited. He has numerous book chapters, edited a book on document processing, and over 40 publications and fifteen patents.
Keynote Speakers

Dhanukumar Pattanashetti

Title: IEEE Xplore: Delivering Better Research than ever

Biodata: Dhanu Pattanashetti is the Client Services Manager at IEEE and is based out of Bangalore. Dhanu works with IEEE Xplore Digital Library customers throughout India and handles IEEE Xplore training (both onsite and via webinar) and presentations, internal IEEE promotions to include IEEE content within library web pages, intranets and other work-flow applications. He closely works with libraries in universities/technical institutions, students/faculty/researchers in academic, government and corporate sectors and advises effective data use for their endeavors.

He has published 2 papers in journals and presented a paper at an international conference in Indonesia. He is currently pursuing his PhD from University of Mysore in the area of scientometrics and submitted his thesis recently.