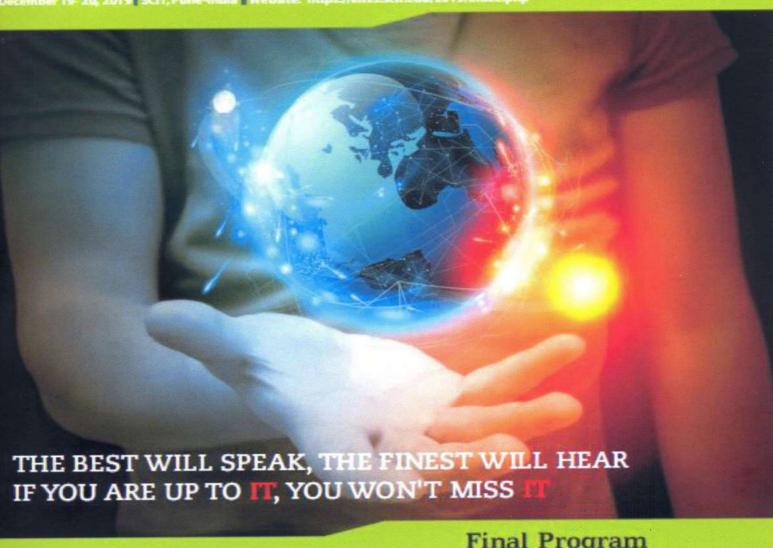


The 3rd International Research Conference on

Emerging Information Technology and Engineering Solutions (EITES 2019)



Final Program



University of Applied Sciences Mainz, Germany





Organised By: Faculty of Computer Studies, Symbiosis International (Deemed University)

Hosting Institute: Symbiosis Centre for Information Technology, Pune India

Email Contact: eites@scit.edu

Prelude

Faculty of Computer Studies (FoCS), Symbiosis International (Deemed University), Symbiosis Centre for Information Technology (SCIT) in academic collaboration with University of Applied Sciences Mainz, Germany - Welcomes You All in the 3rd International Research Conference on Emerging Information Technology and Engineering Solutions (EITES 2019) to be held at Symbiosis Centre for Information Technology (SCIT), Pune, India on 19-20 December 2019. The conference intends to address the solution space that has been created and enriched by the research in emerging IT and associated engineering practices. All accepted & presented papers will be published in EITES 2019 Conference Proceedings. Two exclusive Special Issues (SI) in SCOPUS/WoS indexed International Journal for EITES 2019 has been approved. Extended Version of the selected papers based on the scope will be recommended for submission & publication in Special Issue of following SCOPUS/WoS indexed International Journal:

- International Journal of Cloud Applications and Computing (IJCAC), IGI Global, ISSN 2156-1834
- International Journal of Intelligent Information Technologies (IJIIT), IGI Global, ISSN 1548-3657

Also, extended version of selected papers will be recommended for submission to the following SCOPUS/WoS indexed International Journals:

- Benchmarking: An International Journal (BIJ), Emerald, ISSN 1463-5771
- Internet Research, Emerald, ISSN 1066-2243
- Data Technologies and Applications (DTA), Emerald, ISSN 2514-9288
- International Journal of Computer Applications in Technology (IJCAT), Inderscience Publishers, ISSN 0952-8091

EITES 2019 brings the researchers from industry and academia together who will share the knowledge attained in specific areas of the field. The conference ensures presentation and discussion on quality research work done in recent times. Plenary sessions by recognized researchers and presentation of research papers accepted after quality review process are the major attractions for the research fraternity across industry and academia.

The 1st International Conference on Emerging Information Technology and Engineering Solutions (EITES **2012**) was held on February 2012. Some of the highlights have been:

- Address by Eminent Speakers.
- Quality Review Process was highly appreciated. Acceptance Ratio was 8.33.
- Proceedings were published in the special issues of American Journal of Engineering and Applied Sciences (IJEAS), volume 5, issue: 3, 2012 by Science Publications.
- Three extended papers were published in International Journal of System Assurance Engineering and Management, volume: 3, Issue: 2, June 2012, Springer.
- Two extended papers were published in SCIT Journal 2012, volume: XII, August 2012.

The 2nd International Conference on Emerging Information Technology and Engineering Solutions (EITES 2015) was held on 20-21 February 2015 with following highlights:

- In collaboration with School of Information Science and Engineering, Ritsumeikan University, Japan
- Address by Eminent Speakers.
- Industry Sponsor IBM, India
- Quality Review Process was highly appreciated. Acceptance Ratio was 14.28%.
- Publication Partner: Conference Publishing Services (CPS) published the EITES 2015 Conference Proceedings in CD as well as online in IEEE Xplore.
- Best Paper Award (First): ₹15000.00 & Best Paper Award (Second): ₹10000.00

EITES 2019 will uphold the same quality, standard and equivalent publication opportunities. All accepted & presented papers will be published in **EITES 2019 Conference Proceedings**. Extended version of the selected papers will be recommended for submission & publication in Special Issue OR Regular paper in SCOPUS/WoS indexed International Journal.

EITES 2019

The rapid pace of change in Information Technology has been intimidating for large and small businesses. The level of difficulty in decoding the power of technology and associated engineering may be varying for different businesses considering their experience and expertise but one cannot overrule the inherent complexity of the field.

EITES 2019 intends to address the solution space that has been created and enriched by the research in emerging IT and associated engineering practices.

TRACKS

I. Industry 4.0

- IoT and Analytics
- Smart Cities
- · Digitization/Digitalization
- 3D-Printing
- Smart Manufacturing
- Edge Computing
- Smart Grid

II. Artificial Intelligence and Cognitive Computing

- Automation
- Computer Vision
- Robotics
- Text Analytics and NLP
- Cognitive IoT

III. Cyber Security Analytics

- Data Privacy and Ethics
- Cyber Intelligence
- Next Generation Firewalls
- Software Defined Protection
- Cyber Intrusion Behavior
- Cognitive Cyber Security
- IoT Botnet
- Block Chain

IV. Big Data Analytics

- Analytics Platforms
- Cloud Computing
- NoSQL Databases
- Data Visualization
- Online Social Network Analysis
- High Performance Computing
- Graph-based Data Analysis

V. Software Development

- DevOps
- Development Framework for AI applications
- Software Analytics
- Mining Software Repositories
- Container based Software Artifacts
- Dynamic Discovery & Version Management
- Application Driven Resource Allocation
- Cross Cloud Deployment

VI. Analytics Applications

- Healthcare Analytics
- Marketing Analytics
- Governance
- Digital Transformation
- Supply Chain Analytics
- Science and Engineering
- Energy Analytics

Conference Committee

Chief Patron

• Dr. S.B. Mujumdar, Chancellor, Symbiosis International (Deemed University), India.

Patron

 Dr. Vidya Yervadekar, Pro Chancellor, Symbiosis International (Deemed University) & Principal Director, Symbiosis, India.

Adviser

 Dr. Rajani Gupte, Vice Chancellor, Symbiosis International (Deemed University), India.

Steering Committee Members:

- Prof. (Dr.) L. M. Patnaik, Department of Electronic Systems Engineering, Indian Institute of Science Bangalore, India.
- Prof. (Dr.) Prasenjit Sen, Symbiosis Centre for Information Technology, India.
- Prof. (Dr.) A. K. Sarje, Department of Computer Science & Engineering, Indian Institute of Technology Roorkee, India
- Prof. (Dr.) Marcelo Sampaio de Alencar, Department of Electrical Engineering, Federal University of Campina Grande, Brazil.
- Prof. (Dr.) Ruck Thawonmas, School of Information Science and Engineering, Ritsumeikan University, Japan.
- Prof. (Dr.) Atsushi Ohnishi, School of Information Science and Engineering, Ritsumeikan University, Japan.
- Prof. (Dr.) Joo-Ho Lee, School of Information Science and Engineering, Ritsumeikan University, Japan.
- Prof. (Dr.) Chittaranjan Hota, Department of Computer Sc. & Information Systems, Birla Institute of Technology & Science-Pilani, Hyderabad Campus, India.
- **Prof.** (**Dr.**) **G. S. Mani**, Former Director, & Dean, Institute of Armament Technology Pune, India.
- Dr. Vinay Vaidya, Centre for Research in Engineering Sciences and Technology, KPIT Technologies, Pune, India
- Prof. (Dr.) Anett Mehler-Bicher, School of Business, University of Applied Sciences Mainz, Germany.
- Prof. (Dr.) Gunther Piller, School of Business, University of Applied Sciences Mainz, Germany.
- Prof. (Dr.) Venky Shankararaman, School of Information Systems, Singapore Management University, Singapore.

- Prof. (Dr.) Md. Rakibul Hoque, Faculty of Business Studies, University of Dhaka, Bangladesh.
- Prof. (Dr.) Bernhard Ostheimer, University of Applied Sciences Mainz, Germany.
- Prof. (Dr.) Vijayan Sugumaran, Oakland University, USA.
- Prof. (Dr.) Rameshwar Dubey, Montpellier Business School, France.
- Prof. (Dr.) Rajendra M. Sonar, Indian Institute of Technology Bombay, India.
- Prof. (Dr.) K. Kotecha, Symbiosis Institute of Technology, India.

General Chair

 Prof. (Dr.) Dhanya Pramod, Symbiosis Centre for Information Technology, India.

Program Chair

 Prof. (Dr.) Ajey Kumar, Symbiosis Centre for Information Technology, India.

Technical Program Committee Chairs

- Prof. (Dr.) SVK Bharathi, Symbiosis Centre for Information Technology, India.
- Prof. (Dr.) Anil Jadhav, Symbiosis Centre for Information Technology, India.

Industry Chairs

- Prof. (Dr.) Mandaar Pande, Symbiosis Centre for Information Technology, India.
- **Prof.** (**Dr.**) **Neelesh Kumbhojkar**, Symbiosis Centre for Alumni Engagement, India.

Publicity Chair

 Prof. (Dr.) Kanchan Patil, Symbiosis Centre for Information Technology, India.

Sponsorship Chairs

- Prof. (Dr.) SVK Bharathi, Symbiosis Centre for Information Technology, India.
- Prof. (Dr.) Mandaar Pande, Symbiosis Centre for Information Technology, India.

Publication Chairs

- Prof. (Dr.) Ajey Kumar, Symbiosis Centre for Information Technology, India.
- Prof. (Dr.) Pradnya Purandare, Symbiosis Centre for Information Technology, India.

Financial Chairs

- Prof. (Dr.) Mugdha Kulkarni, Symbiosis Centre for Information Technology, India.
- Mrs. Uma Khapre, Symbiosis Centre for Information Technology, India.

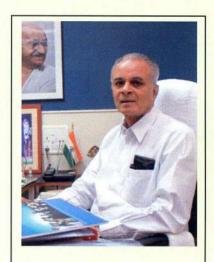
Local Arrangement Chairs

- Prof. Shaji Joseph, Symbiosis Centre for Information Technology, India.
- Mrs. Savitha Nair, Symbiosis Centre for Information Technology, India.

Technical Program Committee

- Prof. (Dr.) Aarti Dixit, Defence Institute of Advanced Technology, India.
- Dr. Apurva Mohan, Schlumberger, U.S.A.
- Dr. Debmalya Biswas, Philip Morris International, Switzerland.
- Prof. (Dr.) Hiromitsu Hattori, Ritsumeikan University, Japan.
- Prof. (Dr.) Hoang Pham, Rutgers University, U.S.A.
- Prof. (Dr.) Hongzhi Wang, Harbin Institute of Technology, China.
- Prof. (Dr. Hrishikesh Venkataraman, Indian Institute of Information Technology Sri City, India.
- Prof. (Dr.) Ikuko Nishikawa, Ritsumeikan University, Japan.
- Prof. (Dr.) Kazuya Murao, Ritsumeikan University, Japan
- Prof. (Dr.) Kenta Oku, Ritsumeikan University, Japan
- Dr. Luciano Mendes, Inatel, Brazil.
- Dr. Mahesh Kuruba, Tata Consultancy Services, India.
- Prof. (Dr.) Mala C, National Institute of Technology Trichy, India.
- Prof. (Dr.) Marco Aiello, University of Groningen, Netherlands.

- Prof. (Dr.) Mu-Song Chen, Da-Yeh University, Taiwan.
- Prof. (Dr.) Nary Subramanian, The University of Texas, U.S.A.
- Prof. (Dr.) Qian Zhu, University of Maryland, U.S.A.
- **Prof.** (**Dr.**) **Roberto Lopez-Gulliver**, Ritsumeikan University, Japan.
- Prof. (Dr.) Seifedine Kadry, American University of the Middle East, Kuwait.
- Prof. (Dr.) Shigeru Yamada, Tottori University, Japan.
- **Prof.** (**Dr.**) **Takahiro Wada**, Ritsumeikan University, Japan.
- **Prof.** (**Dr.**) **Tetsuo Kamina**, Ritsumeikan University, Japan.
- Prof. (Dr.) Udai Shanker, Madan Mohan Malaviya University of Technology, India.
- Prof. (Dr.) Urvashi Rathod, Symbiosis Center for Research and Innovation, India.
- Prof. (Dr.) Rajashree Jain, Symbiosis Institute of Computer Studies and Research, India.
- Prof. (Dr.) Pravin Metkewar, Symbiosis Institute of Computer Studies and Research, India.
- Prof. (Dr.) Shraddha Phansalkar, Symbiosis Institute of Technology, India.
- **Prof.** (**Dr.**) **Himanshu Agrawal**, Symbiosis Institute of Technology, India.
- Prof. (Dr.) Zeeshan Ahmed, The University of Connecticut Health Center, USA.
- **Prof.** (**Dr.**) **Rakesh Kumar**, Madan Mohan Malaviya University of Technology, India.
- Prof. (Dr.) B. B. Gupta, National Institute of Technology Kurushestra, India.
- Prof. (Dr.) Narendran Rajagopalan, National Institute of Technology Puducherry, India.
- Prof. (Dr.) Shivam Gupta, Montpellier Business School, France.
- Dr. Pradeep Bilurkar, Barclays, India.
- **Prof.** (**Dr.**) **Sudeep D. Thepade**, Pimpri Chinchwadi College of Engineering, India.



Dr. S. B. Mujumdar

Dear Brother/ Sister,

On behalf of Symbiosis, I would like to welcome all of you to the 3rd International Research Conference on *Emerging Information Technology* and *Engineering Solutions 2019* (EITES 2019) at Symbiosis Center for Information Technology (SCIT), Pune, India.

Established in 1971, primarily to promote world understanding between Indian and foreign students through education, Symbiosis International Cultural & Educational Centre runs 41 academic institutions ranging from kindergarten to institutes for postgraduate studies in Management, Mass Communication, Medico-Legal Systems, Foreign Languages, Information Technology, Computers etc. We at Symbiosis believe that 'The world is one family'.

SCIT understands that the rapid pace of change in Information Technology has been intimidating for large and small businesses. The level of difficulty in decoding the power of technology and associated engineering may be varying for different businesses considering their experience and expertise but one cannot overrule the inherent complexity of the field.

Finally, I would like to express my deep gratitude to all the delegates for coming from all over the world and expect you will be enjoying EITES 2019 in the historical city Pune, India

With warm regards and good wishes,

Dr. S. B. Mujumdar, Chief Patron- EITES 2019 Founder & President, Symbiosis Chancellor, Symbiosis International (Deemed University), Pune, India



Dr. Vidya Yeravdekar

I am very glad to have the opportunity to welcome the participants of the Third International Research Conference on Emerging Information Technology and Engineering Solutions 2019 (EITES 2019) at the Symbiosis Center for Information Technology (SCIT), Pune, India.

The Symbiosis Centre for Information Technology (SCIT) is a premier IT business school, which has been nurturing genuine IT talent since its inception. In the present fast-growing IT industry, it is very important to stay in step with the advancements in the field. The Institute fosters a spirit of learning that encourages knowledge-generation, innovation, and research. The Conference on EITES 2019 is an initiative to enhance the learning environment for the IT fraternity.

I am very confident that the Conference on EITES 2019 will serve as a valuable platform to bring together academics, researchers, and other

contributors to the field of IT, thereby facilitating cross-exchange of ideas and innovation. I wish the participants every success in making the Conference a milestone achievement.

Dr. Vidya Yeravdekar Patron - EITES 2019

Pro Chancellor, Symbiosis International (Deemed University) & Principal Director, Symbiosis, Pune India.



Dr. Rajani Gupte

It gives me great pleasure to invite you the 3rd International Research Conference on *Emerging Information Technology and Engineering Solutions* 2019 (EITES 2019) at Symbiosis Center for Information Technology (SCIT), Pune, India.

Since its inception, SCIT has maintained the legacy of innovative growth and excellence. Our students are industry focused and know how to harness the technology and blend it with business to gain competitive edge. This is a testimony to the trust and belief that the industry has bestowed upon us for the past two decades and more importantly a commitment from SCIT to deliver the best consistently. The time comes again for us to share with you the excitement of interacting with the best minds we have at EITES 2019.

I sincerely hope that EITES 2019 will be a worthwhile opportunity for strengthening our already existing bonds and forging new ones with researchers from around the world.

With regards and good wishes,

Dr. Rajani Gupte Adviser-EITES 2019

Vice Chancellor, Symbiosis International (Deemed University), Pune India



Prof. (Dr.) Dhanya Pramod

Dear All,

It is my pleasure to welcome you to the Third International Research Conference on Emerging Information Technology and Engineering Solutions (EITES) 2019, held at SCIT, Pune, India. EITES 2019 is being organized by Faculty of Computer Studies (FoCS), Symbiosis International (Deemed University) in academic collaboration with University of Applied Sciences Mainz, Germany.

This is inspired by the success of EITES 2015 & EITES 2012, which witnessed high quality paper presentations and publication of the same in

reputed international journals and IEEE Xplore. EITES 2019 is conceptualized with the intent to bring technological advancements and engineering solutions to a single platform where researchers, academicians and industry experts share their knowledge and present their research work. SCIT has a strong research focus and developed a culture of collaborative research among academicians and industry experts. We look forward to further our research exposure through this conference in addition to the research projects, discussions, knowledge sharing and publications that we undertake regularly.

We received submissions in all the tracks. The submissions went through a rigorous review process and high quality papers were selected for presentation in the conference. The International Program Committee (IPC) has reviewed the papers and the acceptance ratio is 36.6 %. The papers that were not recommended by IPC were also of good quality and we believe that the reviewer's comments will help the authors in enhancing their work and further send it for publication in such reputed conference. All accepted & presented papers will be published in EITES 2019 Conference Proceedings. Extended version of the selected papers will be recommended for submission & publication in Special Issue / Regular paper in SCOPUS/WoS indexed International Journal.

I am thankful to the entire faculty and staff members of SCIT for hosting this conference and their dedication throughout the entire process. Last but not least, I would like to thank the chief patron, patron, adviser, and all the conference committees. Again, I welcome all participants for the conference and hope you have an excellent value add and exposure with the international research community.

Prof. (Dr.) Dhanya Pramod General Chair -EITES 2019

Dean, Faculty of Computer Studies, Symbiosis International (Deemed University), Pune India Director, Symbiosis Centre for Information Technology, Pune, India



Prof. (Dr.) Ajey Kumar

It is our great pleasure to welcome you all in the 3rd International Research Conference on Emerging Information Technology and Engineering Solutions (EITES 2019) at SCIT, Pune, India on 19-20th December 2019. The conference intended to address the solution space that has been created and enriched by the research in emerging IT and associated engineering practices.

EITES 2019 is held in academic collaboration with University of Applied Sciences Mainz, Germany and upheld the same quality and standards as that of EITES 2015 & EITES 2012. The solicitation of full papers, submissions, reviews and results were totally done using the EasyChair conference management system.

I would like to express our deep gratitude to all the Technical Program Committee members and reviewers for accepting our invitation to get associated with EITES 2019 and performing high quality reviews. Your reviews helped us to select the best quality of papers in various emerging areas in IT.

Our sincere gratitude goes to all the researchers/authors who selected EITES over other conferences for submitting their research papers. A *big thanks* to the editors of IJCAC & IJIIT (Scopus/WoS) for approving the Special Issue for EITES 2019 and also to the editors of BIJ, Internet Research, DTA & IJCAT (Scopus/WoS) for agreeing to take one or two extended versions. I would like to thank Chief Guest and Keynote Speakers for providing a platform for listeners about research leading to the upcoming technologies and engineering solutions.

I also wish to take this opportunity to thank all conference committee chairs and supporting organizations of EITES '19, especially University of Applied Sciences Mainz, Steering Committee Members, General Chairs and Industry Chairs, for their support and guidance. A special *thanks* is *also* extended to Chief Patron, Patron, Adviser of EITES 2019 and Dean FoCS.

Prof. (Dr.) Ajey Kumar Program Chair -EITES 2019

Programme @ a Glance

Venue:	Day 1: Thursday, 19th December 2019 SIC Auditorium, Symbiosis Centre for Information Technology (SCIT)
9:00AM - 10:45AM	Paper Session I Chair: Prof. (Dr.) Sudeep Thepade, Pimpri Chinchwad College of Engineering, Pune, India Role of Business Intelligence in Data Driven Decision Making Amit Awasthi and Deepika Pandita, Symbiosis Institute of Business Management Pune, SIU, India Contact Center Productivity Improvement based on Predictive Analytics Rishabh Tyagi and Sandeep Bhattacharya, Symbiosis Institute of Business Management Pune, SIU, India Migration from DevOps to DevSecOps - A Complete Framework Nisha T N and Amit Khandebharad, Symbiosis Centre for Information Technology, Pune, SIU, India Processing Digital ECG Waveform across selected database to Estimate Heart Rate and Heart Rate Variability in MATLAB Falguni Thakker, Jayshree Tailor and Hemraj Lamkuche, Uka Tarsadiya University, Gujarat; Symbiosis International (Deemed University), India Student Self-Efficacy and Entrepreneurial Intentions: A Pedagogical View Arpita Sharma, Sunaina Kuknor and Chetan Panse, Symbiosis Institute of Business Management Pune, SIU, India Privacy Policy Visualization Vidyavati Ramteke and Ragini Tahiliani, Symbiosis Centre for Information Technology, Pune, SIU, India
10:45AM - 11:00AM	TEA BREAK
11:00AM - 11:45 AM	Inauguration and Address by Dr. S.B. Mujumdar, Founder & President, Symbiosis & Chancellor, Symbiosis International (Deemed University), Pune, India Dr. Vidya Yeravdekar, Pro Chancellor, Symbiosis International (Deemed University) & Principal Director, Symbiosis, Pune, India Dr. Rajani Gupte, Vice Chancellor, Symbiosis International (Deemed University), Pune, India Dr. Dhanya Pramod, Dean FoCS, Symbiosis International (Deemed University), Pune, India & Director, Symbiosis Centre for Information Technology, Pune, India
	Address by Chief Guest
11:45AM - 12:15PM	Mr. Sanjeev Nikore, Growth Strategist, Ex-President Strategic Initiatives Tech Mahindra, India

1:15PM - 2:00 PM	LUNCH
2:00PM - 3:00PM 3:00PM - 4:00 PM	Keynote II: Augmented and Virtual Reality: Categorization of Application Prof. (Dr.) Anett Mehler-Bicher, Dean, School of Business University of Applied
	Sciences Mainz, Germany. Keynote III: IT enabled Engineering Process
	Mr. Amit K. Pandey, Technical Director, Telematics, Cummins, India
4:00 PM - 4:15 PM	TEA BREAK
4:15 PM - 5:15 PM	Keynote IV: IT Innovation Adoption: Strategies and System Design
	Prof. (Dr.) Gunther Piller , Vice Dean, School of Business University of Applied Sciences Mainz, Germany.
	Paper Session II
	Chair: Prof. (Dr.) Anett Mehler-Bicher, University of Applied Sciences Mainz, Germany
5:15 PM - 6:30 PM	Analyzing Impact of Storytelling Advertisements on Consumer Purchase Intention using Marketing Analytics Sujata Joshi, Chanda Barshekee and Amit Bais, Symbiosis Institute of Digital and Telecom Management, SIU, Pune, India
	Industry 5.0: Human Touch and the Future Dharmesh K Mishra and Dipen Paul, Symbiosis Institute of International Business SIU, Pune, India
	Intelligent Digital Intermediation Solution: Exploring Growth Potential with Analytics
	Neha Vivek Dharurkar and Ramakrishnan Raman, Symbiosis International (Deemed University) Pune, India
	New Age Use Cases and Solutions for Digital Transformation in the Retail Sector Runali Mehta and Mandaar Bhaskar Pande, Symbiosis Centre for Information Technology, Pune, SIU, India
6:30 PM - 9:00 PM	Cultural Program by EKLAVYA followed by Dinner

Day 2: Friday, 20th December 2019

Venue: SIC Auditorium, Symbiosis Centre for Information Technology (SCIT)

	Paper Session III
	Chair: Prof. (Dr.) Gunther Piller, University of Applied Sciences Mainz, Germany
9:00 AM - 10:45 AM	Robo-Advisory Services In India: A Study To Analyze Perception of Millennials Arti Chandani, S. Sriharshitha, Ankita Bhatia, Mita Mehta and Rizwana Atiq, Symbiosis Institute of Management Studies, SIU, Pune; Integral University, Lucknow, India
	Marketing Analytics for Analysing Social Media and Branding Efforts of Indian Telecom Operators Sujata Joshi, Sindhu Kopparati and Vaishali Singhal, Symbiosis Institute of Digital
	E-MODI: E-Governance Model using Open Distributed Infrastructure Vijaya Bhaskar Kondaveety, Vijaya Lakshmi Sapparam, Shruti Singh, Raj Rajpurkar and Hemraj Lamkuche, Symbiosis Centre for Information Technology, Pune, SIU; Symbiosis International (Deemed University) Pune, India
	Separation of Printed and Non-Printed Sections using Modified Global Threshold approach from Medical Prescription Document Images Gururaj Mukarambi, Jatinder Kumar R Saini and Hema Gaikwad, Central University of Karnataka, India; Symbiosis Institute of Computer Studies & Research, SIU, Pune, India
	Futuristic Role of Big Data in Managing OTT Pradnya Purandare, Samaya Pillai, Rahul Dhaigude and Minal Abhyankar, Symbiosis Centre for Information Technology, Pune, SIU; Symbiosis Institute of Digital and Telecom Management, SIU; Symbiosis Institute of Management Studies, SIU; Symbiosis Institute of Computer Studies & Research, SIU, Pune, India
	Question Generation Using Sequence to Sequence Network Rohan R. Tipare and Yashodhara V. Haribhakta, College of Engineering Pune, India
10:45 AM - 11:00 AM	TEA BREAK
11:00 AM - 12:00 PM	Keynote V: Industry Use Cases and Solutions using AI and Machine Learning Mr. Sanjay Nambiar, Vice-President, Wipro HOLMES, India
	Paper Session IV
12:00 PM - 1:00 PM	Chair: Prof. (Dr.) R. Meenakshi, Saveetha Engineering College, India
	To be or Not to be on Social Media? Analysis using Tragedy of Commons Aniruddha Joshi, Madhura Ranade and Paritosh Bedekar, SP Pune University; Symbiosis Institute of International Business, SIU, Pune, India
	Gamification and Q-learning for Motivation of User Participation on Crowdsourcing Platform

	Vijayalakshmi Anand and Chittaranjan Hota, BITS-Pilani off-Campus Center, Pune
	BITS -Pilani Hyderabad Campus Hyderabad, India
	Acquisition of Information in Traffic Video using Multi-layer Continuous Virtual Loop (MCVL) Model Manipriya Sankaranarayanan, Mala C and Samson Mathew, National Institute of Technology, Tiruchirappalli, India
1:00 PM - 2:00 PM	LUNCH
2:00 PM - 3:00 PM	Keynote VI: TextSense: Advanced Text Analytics platform-Internals and Business Use Cases
	Dr. Aniruddha Pant, CEO, AlgoAnalytics Pvt. Ltd, Pune, India
	Paper Session V
	Chair: Prof. (Dr.) Bernhard Ostheimer, University of Applied Sciences Mainz, Germany
3:00 PM – 4:15 PM	Towards Reducing Bullwhip Effect in Supply Chain Management Using Blockchain Technology
	Mukesh Kumar Rohil and Srujana N, Birla Institute of Technology and Science Pilani, India
	An Ontology Framework for Cyber Security in Disrupted Technology Prasenjit Sen, Symbiosis Centre for Information Technology, Pune, SIU, India
	Transforming Customer Experience in the Digital Transformation Neelesh Kumbhojkar and Arun Menon, Symbiosis Centre for Alumni Engagemen
	SIU; Jade Global Software Pvt Ltd, Pune, India
4:15 PM - 4:30 PM	TEA BREAK
4:30 PM - 5:30 PM	Valediction Ceremony

Speakers



Inaugural Address as Chief Guest

11:45 AM - 12:15 PM, Thursday, December 19, 2019

Mr. Sanjeev Nikore, Growth Strategist, Ex-President Strategic Initiatives, Tech Mahindra, India



Keynote I: Educational Technology- Some Perspectives

12:30 PM - 1:15 PM, Thursday, December 19, 2019

Dr. M. Sasikumar, Executive Director, CDAC, Mumbai, India



Keynote II: Augmented and Virtual Reality: Categorization of Application

2:00 PM - 3:00 PM, Thursday, December 19, 2019

Prof. (**Dr.**) **Anett Mehler-Bicher**, *Dean, School of Business University of Applied Sciences Mainz*, Germany.



Keynote III: IT enabled Engineering Process

3:00 PM - 4:00 PM, Thursday, December 19, 2019

Mr. Amit K. Pandey, Technical Director, Telematics, Cummins, India



Keynote IV: IT Innovation Adoption: Strategies and System Design

4:15 PM - 5:15 PM, Thursday, December 19, 2019

Prof. (Dr.) Gunther Piller, Vice Dean, School of Business University of Applied Sciences Mainz, Germany.



Keynote V: Industry Use Cases and Solutions using AI and Machine Learning

11:00 AM - 12:00 PM, Friday, December 20, 2019

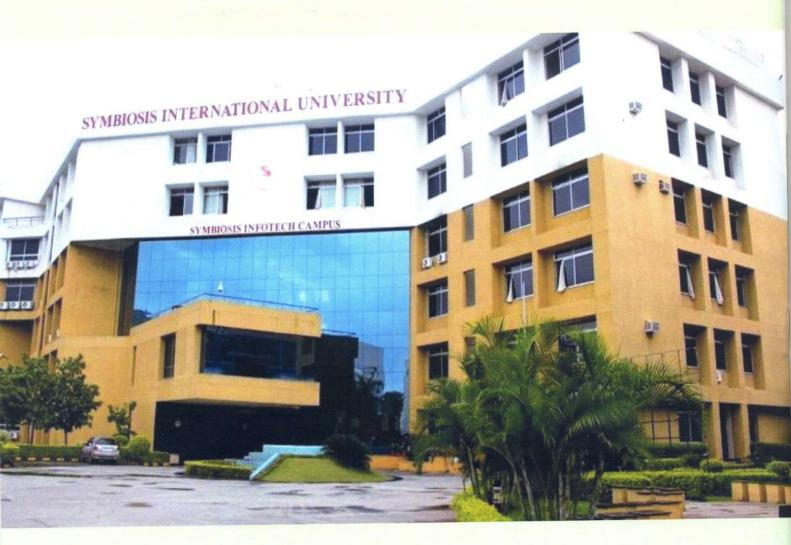
Mr. Sanjay Nambiar, Vice-President, Wipro HOLMES, India



Keynote VI: TextSense: Advanced Text Analytics platform-Internals and Business Use Cases

2:00 PM - 3:00 PM, Friday, December 20, 2019

Dr. Aniruddha Pant, CEO, AlgoAnalytics Pvt. Ltd, Pune, India







(A constituent of Symbiosis International University)

Plot 15, Rajiv Gandhi Info Tech Park, Hinjewadi, Pune – 411 057. Maharashtra, India