

ICT ACADEMY
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FORUM 2020

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ICSEHV 2020

INTERNATIONAL CONFERENCE ON ADVANCES IN SENSORS, ENERGY AND HYBRID VEHICLES



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ABOUT ICT ACADEMY OF TAMIL NADU

ICT Academy of Tamil Nadu is an initiative of the Government of India, Government of Tamil Nadu and Industries. ICT Academy is a not-for-profit society, the first of its kind pioneer venture under the Public-Private-Partnership (PPP) model that endeavours to train the higher education teachers and students thereby exercises on developing the next generation teachers and industry ready students.

ICT Academy was started to meet the skill requirements of the industry and generate more employment especially in tier 2 and 3 towns, the rural parts of the country. The organization was formed with representations from the State Government of Tamil Nadu and leading companies in the ICT industry.

With training of teachers and students as the primary objective, ICT Academy has been working through a seven pillar program in the areas of Faculty Development, Student Skill Development, Entrepreneurship Development, Youth Empowerment, Industry-Institute Interaction, Digital Empowerment and Research & Publications.

ICT Academy has strives on every aspect to provide a holistic service to every stakeholder of the education ecosystem in developing the next generation of talent pool in India to make them industry ready employees, innovators, entrepreneurs and leaders.

Through its various initiatives, ICT Academy has been part of strengthening the India's four important visions on Skill India, Digital India, Startup India and Make in India.



ABOUT GTF2020

ICT Academy promotes research activities by providing platform in the form of International Scientific Research Journals and Conferences for sharing the research outcomes in the areas of Information and Communication Technology. GTF2020 by ICT Academy hosted online through a virtual platform thereby providing opportunity to researchers from across the globe to participate and learn from the comfort of being at their place. The Online platform also helped cutting unnecessary costs and expenditures towards travel/stay for attending such global conferences. The Forum created access to expertise on range of topics with LIVE as well as recorded sessions for the future reference.

GTF2020

Keynote Sessions

GTF2020 featured expert keynote sessions delivered by leaders and renowned experts across the globe, with a higher level of abstraction providing specific explanations, and applications to the participants on the theme of the conference. The keynotes provided deeper insights, knowledge and value to the participants.

GTF2020

Tutorial Sessions

Expert Tutorial sessions was an integral part of Global Technology Forum 2020. Experts from across the globe submitted proposals on current and emerging trends related to the theme of GTF2020. It was intended to provide a high quality learning experience to the attendees who wish to learn new technologies. Expert tutorials were featured in the conference delivered by leading industry professionals and renowned academicians.

Conference - Paper Presentations

GTF2020 hosted technical research paper presentations in each of the conferences by researchers, practitioners, scientists and academicians. Accepted papers were invited for presentation and are published in this Conference proceedings. The best papers selected from the presentations are being reviewed for publication in ICT Academy Journals, which are listed in Group I of UGC-CARE List.









KEYNOTE AND TUTORIAL SPEAKERS



Thiru R B Udhayakumar Hon'ble Minister For Revenue Disaster Management & IT Government of Tamil Nadu, India



Hans Raj Verma IAS Additional Chief Secretary IT Department Govt. of Tamil Nadu, India



Prof Jeffrey Ullman Stanford University United States



Dr Rajendrakumar IAS Additional Secretary Ministry of Electronics & Information Technology, Govt. of India



Prof K K Aggarwal
Chairman
National Board of Accreditation
Government of India



Prof Tarek Sobh Lawrence Technological University, United States



Lakshmi Narayanan Emeritus Vice Chairman, Cognizant Chairman, ICT Academy, India



Prof Mufti Mahmud Nottingham Trent University United Kingdom



Prof Demetri Terzopoulos
Distinguished Professor and
Chancellor's Professor of Computer Science
University of California, United States



Prof Elisabetta Comini University of Brescia Italy



Ramanan Ramanathan Mission Director Atal Innovation Mission NITI AAYOG, Government of India



Prof Mohamed-Slim Alouini
King Abdullah University
of Science and Technology



Sunita Sanghi Principal Advisor, Ministry of Skill Development & Entrepreneurship Government of India



Dr Tanya Morton

MathWorks
United Kingdom



Prof M K Surappa Vice Chancellor Anna university, India



M Vijayakumar IAS

Managing Director
Electronics Corporation of Tamil Nadu



Dr Karisiddappa Vice Chancellor Visvesvaraya Technological University, India



Pete Winn Senior Research Advocate Oracle



Dr Christian Hirst Head - Political and Economic Sections Australian High Commission New Delhi



H E Mohamed Maliki Ambassador of His Majesty the King of Morocco to the Republic of India



Chocko Valliappa Vice Chairman Sona Group of Institutions Salem, India



M Sivakumar Chief Executive Officer ICT Academy, India



Nikhil Bagalkotkar India Technical Head & Strategy Autodesk



Tmt P Ramana Saraswathi, IAS Joint Director of e-Governance and Joint CEO TNEGA, Government of Tamil Nadu



Prof Rajkumar Buyya University of Melbourne Australia



Dr Anbu Rathinavel Chief Design officer Intellect Design Arena Ltd



Prof Salil Kanhere University of New South Wales Australia



Kiran Jacob Dassault Systemes



Dr Ramesh Pudale



Dr G Sainarayanan General Manager Engineering and R&D Services HCL Technologies Ltd



Dr Debanand Singdeo MathWorks



Ramana Anchuri MathWorks



Haridas Menon U Head - HR TCS Research & Org. Infra.



Dr Dhruv Chandel MathWorks



Prof Bjoern Schuller Imperial College of London United Kingdom



Subodh Gajare ^{Cisco}



Arjun Meda Automation Anywhere



Pramod Agrawal Automation Anywhere



Naga Chakrapani Pemmaraju MathWorks



Dr Mustafa Kishk King Abdullah University of Science and Technology Saudi Arabia



Anand Pujari Autodesk



Dr B Anbuthambi President ICT Academy



Bindu Nanjundaswamy Oracle



Dhiren Dutta Oracle



Shishir Laxminarayan Oracle



Shivaprasad A V _{Vmware}



Ramya Victor _{Vmware}



Chandana Radhakrishna Oracle



Rajendra Raghuvanshi ^{Oracle}



Badari Hiriyur _{Autodesk}



Ranjani Swaminathan Vmware



5 DAYS CONFERNCE SCHEDULE

gtf2020.ictacademy.in







Day 1: 14 October 2020 (Wednesday)

	TIME (in IST)	AGENDA		
		GTF 2020 Inaugural Session		
		Opening Address		
	09:30 am - 09:45 am	Thiru Lakshmi Narayanan Chairman, ICT Academy & Emeritus Vice Chairman, Cognizant		
		Special Address		
	09:45 am - 10:00 am	Thiru Hans Raj Verma IAS Additional Chief Secretary - IT Department, Government of Tamil Nadu, India		
	40.00 40.20	Chief Guest Address		
	10:00 am - 10:30 am	Thiru R B Udhayakumar Hon'ble Minister for Revenue, Disaster Management & Information Technology Government of Tamil Nadu, India		
		Vote of Thanks		
	10:30 am - 10:40 am	M Sivakumar Chief Executive Officer, ICT Academy		
		Technical Keynote Session		
	10:40 am – 11:15 am	The Battle for Data Science		
		Prof Jeffrey D Ullman, Professor (Emeritus), Computer Science, Stanford University, United	States	
		Tutorial Session I (Audi 1) Reinforcement Learning for Autonomous Systems using MATLAB		
		Dr Dhruv Chandel - Engineer, Education Team, Mathworks		
		Naga Chakrapani Pemmaraju - Senior Application Engineer, Mathworks		
		Tutorial Session II (Audi 2) Building PRA Bots with Automation Anywhere Enterprise A2019		
	11:20 am – 01:30 pm	1:20 am – 01:30 pm Building RPA Bots with Automation Anywhere Enterprise A2019 Pramod Agrawal - Vice President & Regional CTO, Automation Anywhere		
		Arjun S Meda - Senior Developer Evangelist, Automation Anywhere		
		Tutorial Session III (Audi 3) Evaluate limitage possibilities with Constative Posice value Autodock Eurice 36	0	
		Explore limitless possibilities with Generative Design using Autodesk Fusion 36 Dr Ramesh Pudale - Program Manager, Autodesk Education Experiences	U	
		Anand Pujari - Account Manager, Autodesk Education Experiences		
		Badari Hiriyur - Education Program Specialist, Autodesk Education Experiences		
	01:45 pm – 03:45 pm	Technical Paper Presentation Track 1a: Al in Healthcare Track 2a: Data Analytics Track 3a: NLP, Imaging and Com	outos Vision	
	·	(Audi 1) (Audi 2) (Audi 3)		
	03:50 pm – 05:20 pm	Track 1b: Al in Healthcare (Audi 1) Track 2b: Data Analytics (Audi 2) Track 3b: NLP, Imaging and Com (Audi 3) Security & Automatio		
Evening Keynote Session				
	05:30 pm – 06:00 pm Al in Engineering Education, Research and Industry			
	06:00 pm – 06:30 pm	Dr Tanya Morton, Director of APAC and EMEA Customer Success Engineering, Mathworks Treating Neurodegenerative Diseases: A Neuronal Networks Decoding Approac	h	
		Prof Mufti Mahmud, Senior Lecturer, Computing & Technology, Nottingham Trent Universit		
06:30 pm – 07:00 pm The Evolution of Design, how AI, ML and Robotics are changing the design p			sses in the	
		Design, Manufacturing & Construction Industries Nikhil Bagalkotkar, India Technical Head & Strategy, Autodesk		
		Mikint Dayatkotkai, iliala Teciliikat Head & Strategy, Autotiesk		







Day 2:15 October 2020 (Thursday)

TIME (in IST)	AGENDA		
	Opening Keynote Session		
09:25 am – 09:45 am	Prof K K Aggarwal Chairman, National Board of Accreditation, Government of India		
09:45 am – 10:00 am	Chocko Valliappa Vice Chairman & Trustee, Sona Group of Institutions, Salem, India		
	Technical Keynote Session		
10:00 am – 10:40 am	What should 6G be? Prof Mohamed-Slim Alouini, Professor, Electrical and Computer Engineering, King Abdullah University of Science and Technology, Saudi Arabia		
10:40 am – 11:15 am	Blockchain for Cyber Physical Systems Prof Salil Kanhere, Professor, School of Computer Science & Engineering, University of New South Wales, Australia		
	Technical Paper Presentation		
09:30 am – 11:15 am	Track 1d: AI in Healthcare and (Audi 1) Industrial (Audi 2) Applications in AI		
11:20 am – 01:45 pm	Tutorial Session I (Audi 1) Challenges and Solutions for Flight Duration Enhancement in UAV-enabled Wireless Networks: A Stochastic Geometry Perspective Prof Mohamed-Slim Alouini - Professor, Electrical and Computer Engineering, King Abdullah University of Science and Technology, Saudi Arabia Dr Mustafa Kishk - Postdoctoral Research Fellow, King Abdullah University of Science and Technology, Saudi Arabia		
	Tutorial Session II (Audi 2) Oracle Cloud: Provisioning Linux OS Bindu Nanjundaswamy - India Business Unit Head – Linux Support Delivery, Oracle Anuradha Sharma - Country Manager, Oracle Academy Initiatives - South Asia Shishir Laxminarayan - Technical Support Engineer, Oracle Dhiren Dutta - Senior Technical Support Engineer, Oracle		
11:20 am – 01:30 pm	Technical Paper Presentation Track 1e: Industrial Applications in AI (Audi 3)		
01:45 pm – 03:45 pm	Track 1a: Bio-Medical Imaging (Audi 1) & Video Processing (Audi 2) Systems Track 3a: Wireless Communications (Audi 3) & Networks		
03:50 pm – 05:20 pm	Track 1b: Bio-Medical Imaging (Audi 1) & Video Processing (Audi 2) Systems & its Applications Track 3b: Embedded Systems & (Audi 3) its Applications		
05:30 pm – 07:00 pm	Track 1c: Bio-Medical Imaging (Audi 1) & Video Processing (Audi 2) Applications (Audi 3) & Networks		







Day 3 : 16 October 2020 (Friday)

Day 3. 10 October 2020 (Friday)			
TIME (in IST)	AGENDA	V	
09:30 am – 10:10 am 10:10 am – 10:40 am 10:40 am – 11:10 am	Opening Keynote Session Dr Rajendra Kumar IAS Additional Secretary, Ministry of Electronics at Kiran Jacob Industry Process Consultant - Dassault System Thiru M Vijayakumar IAS Managing Director, Electronics Corporation of		
11:20 am – 01:45 pm	Tutorial Session I (Audi 1) Modeling & Simulation of Electrical Systems using MATLAB & Simulink Dr Debanand Singdeo - Technical Education Evangelist, Mathworks Ramana Anchuri - Education Technical Evangelist, Mathworks Tutorial Session II (Audi 2) Virtualization 101 Shivaprasad Adampalli Venkateshappa, Staff Engineer, Vmware Ranjani Swaminathan, Senior Technical Staff, Vmware Ramya Victor, Senior Technical Staff, Vmware		
01:45 pm – 03:45 pm 03:50 pm – 05:20 pm	Technical Paper Presentation Track 1a: Industrial Energy Systems (Audi 1) Track 1b: Industrial Energy Systems (Audi 1)	Track 2a: Sensors & Applications (Audi 2) Track 2b: Hybrid Control for Autonomous Vehicle (Audi 2)	
06:15 pm – 07:00 pm Recent Directions in Multidisciplinary Engine		s, Director - Sensor Laboratory, University of Brescia, Italy	







Day 4: 17 October 2020 (Saturday)

Day 4: 17 October 2020 (Saturday)			
TIME (in IST)	AG	ENDA	
09:30 am – 10:05 am 10:05 am – 10:40 am 10:40 am – 11:15 am	Neoteric Frontiers in Cloud and	ce, Oracle, Australia of AI, Department of Computing, Imp	
11:20 am – 01:45 pm	Tutorial Session I (Audi 1) 5G driving Massive IoT - Architecture and industry use cases Subodh Gajare - Lead Architect, CISCO Tutorial Session II (Audi 2) Oracle Cloud: Setting up Web Server Bindu Nanjundaswamy - India Business Unit Head – Linux Support Delivery, Oracle Anuradha Sharma - Country Manager, Oracle Academy Initiatives - South Asia Rajendra Raghuvanshi - Principal Technical Support Engineer, Oracle Chandana Ramakrishna - Technical Support Engineer, Oracle		
01:45 pm – 03:45 pm	Technical Paper Presentation Track 1a: IoT Techniques (Audi 1) and Applications	Track 2a: IoT Techniques (Audi 2) and Applications	Track 3a: Edge and Cloud (Audi 3) Computing
03:45 pm – 05:20 pm	Track 1b: IoT Techniques (Audi 1) and Applications	Track 2b: IoT Techniques (Audi 2) and Applications	Track 3b: Cloud Computing (Audi 3) Security
Evening Keynote Session I R Ramanan Mission Director – Atal Innovation Mission, NITI AAYOG, Government of India Deep Learning of Neuromuscular and Visuomotor Control of a Biomimetic Simulated Humanoid Prof Demetri Terzopoulos, Distinguished Professor and Chancellor's Professor of Computer Science University of California, United States Evening Keynote Session II Sunita Sanghi Senior Advisor, Ministry of Skill Development & Entrepreneurship, Government of India Tmt P Ramana Saraswathi, IAS Joint Director of e-Governance and Joint CEO, TNEGA, Government of Tamil Nadu Dr Christian Hirst Head - Political and Economic Sections, Australian High Commission, New Delhi H E Mohamed Maliki			Biomimetic Simulated ofessor of Computer Science, ment of India nil Nadu

Ambassador of His Majesty the King of Morocco to the Republic of India













GTF 2020 - Closing Ceremony

Day 5: 18 October 2020 (Sunday)

TIME (in IST)

AGENDA

POWER PANEL DISCUSSION - THE ROLE OF ACADEMIA IN FUTURE OF RESEARCH

This exclusive power panel will drive discussions and delibrations on the title **"The Role of Academia in Future of Research"** and which shall bring in the perspectives in the folloing areas:

- Changing Role of Academia in Research
- The Future of Research
- Academia Collaboration in Industrial Research

10:00 am - 11:30 am

Prof M K Surappa

Vice Chancellor, Anna university, India

Dr Karisiddappa

Vice Chancellor, Visvesvaraya Technological University, India

Haridas Menon U

Head - HR, TCS Research & Org. Infra.

Dr Anbu Rathinavel

Chief Design Officer, Intellect Design Arena Ltd

Dr G Sainarayanan

General Manager, HCL Technologies Ltd

11:30 am - 11:45 am

Best Paper Recognition Ceremony

11:45 am - 12:10 pm

Vote of Thanks

Dr B Anbuthambi

President, ICT Academy

PATRONS



Prof Ashutosh Sharma Secretary - Department of Science and Technology Government of India



Prof K K Aggarwal
Chairman
National Board of Accreditation



Dr Virander Singh Chauhan Chairman National Assessment and Accreditation Council



Prof Anil D Sahasrabudhe
Chairman
AICTE



Lakshmi Narayanan Emeritus Vice Chairman, Cognizant Chairman, ICT Academy



Hans Raj Verma IAS Additional Chief Secretary (FAC) - IT Department Government of Tamil Nadu



Sunita Sanghi IES Senior Advisor - Ministry of Skill Development & Entrepreneurship, Government of India



M Vijayakumar IAS Managing Director Electronics Corporation of Tamil Nadu



Santosh K. Misra IAS Commissioner - e-Governance MD - Tamil Nadu e-Governance Agency



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Ravishankar Rao Head - Strategy and Operations India CISCO



Prof Rakesh Kumar Sharma
Vice Chancellor
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K Senthil Nayagam SVP, Global Revenue Assurance & Chief Learning Officer, Hexaware Technologies



Dr Anbu Rathinavel Chief Design Officer Intellect Design Arena Ltd



M P Vijay Kumar Chief Financial Officer Sify Technologies Ltd



M Sivakumar Chief Executive Officer ICT Academy



Ram Singampalli Chief Operating Officer Hexaware Technologies



Shiv Ajagane Vice President & Group Delivery Head -Manufacturing, Atos | Syntel



Vasudevan Rajagopalan Head - Talent Acquisition (India) Tata Consultancy Services



Viswanathan Venkat Director- Talent Acquisition Wipro Limited



Dr G Sainarayanan General Manager, Engineering and R&D Services, HCL Technologies Ltd



J Kesavardhanan Founder and CTO K7 Computing



Koodli Subramanya Director - Industry Business Consultant Dassault Systemes



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Sabita J AVP - Human Resources Sopra Steria



CA V Pattabhi Ram Partner Yoganandh & Ram



Benedict Arockiasamy Vice President - Learning and Development, CSS Corp



Chandrashekar C Senior Director - HR, Virtusa



Dr B Anbuthambi President ICT Academy

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INTERNATIONAL CONFERENCE ON

ADVANCES IN SENSORS, ENERGY AND HYBRID VEHICLES





ICSEHV 2020 brings together the scientists, practitioners, researchers and scholars to submit their research papers on all aspects of Sensors, Energy and Hybrid Vehicles and beyond. Authors are invited to submit original and unpublished research work; papers of successful technology transfer to new problem domains in the specified conference scopes.

SCOPE

- Actuators
- Acoustic and Ultrasonic Sensors
- Biosensors & Nanosensors
- Optical Sensors
- Photovoltaic Systems
- Sensors and Transducers
- ⊙ Sensor Materials, Processing & Fabrication
- ⊙ Systems & Control Engineering
- Wearable Sensors
- Alternate Energy Technologies
- Charging Stations
- Components, Circuits, Devices and Systems
- Cogeneration and Energy Storage
- ⊙ Distributed Generation Systems & Technologies
- Energy Aware Real-Time Methods
- ⊙ Energy Related Systems
- ⊙ Green Engineering

- Hybrid Power Systems
- Power electronics and energy systems
- Electrification of Heavy-duty Vehicles
- Electromagnetic compatibility in Hybrid Vehicles
- Electronic Controls
- ⊙ Electronic Fuel Control Systems
- Hybrid Electric Vehicles
- Industrial Practices, Benchmark Suites
- Measurements technology
- Mobile and Vehicular antennas
- Radio propagation for Vehicular Communications
- Support System for Industry 4.0
- Systems Collision Avoidance Systems
- Vehicle Design, analysis and control for Hybrid Vehicles
- Wave energy system and Fuel cell



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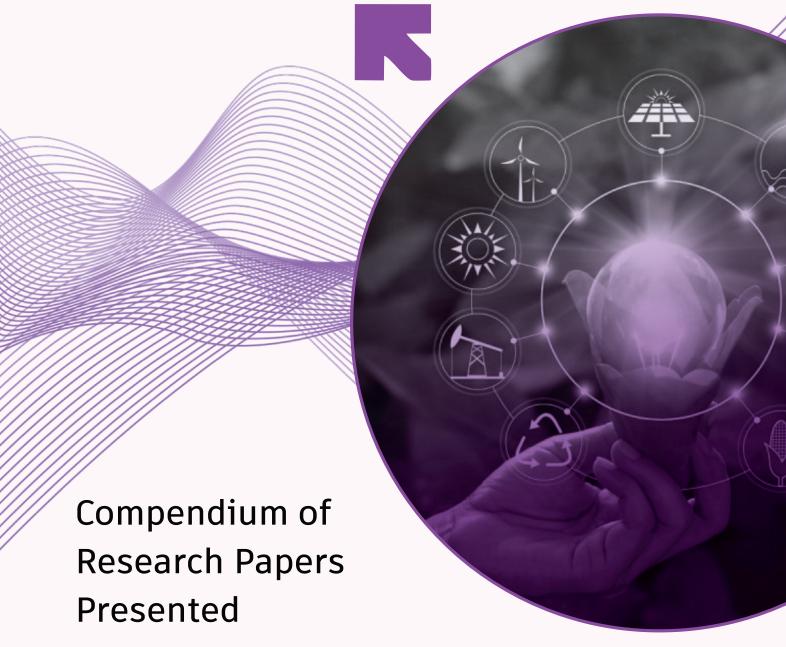


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