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Technical Program for Friday January 5, 2018

FrAT1 Networked Systems (Invited Session)	Outreach Auditoriun
Networked Systems (Invited Session) Chair: Chopra, Nikhil	Univ. of Maryland, Coll. Parl
Co-Chair: Swikir, Abdalla	Tech. Univ. Münchel
Organizer: Chopra, Nikhil	Univ. of Maryland, Coll. Par
Organizer: Vaidya, Umesh	Iowa State Uni
10:30-10:50	
Weighted Kernel Deterministic Annealing: A Maximum-Entropy Principle Approach for Sha	pre Clustering (I) pp. 1-6
Baranwal, Mayank	Univ. of Illinoi
Salapaka, Srinivasa	Univ. of Illinoi
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Interpretation of Complex Reaction Networks in Boolean Network Framework (I), pp. 7-11.	
Sutavani, Sarang	Veermata Jijabai Tech. Inst. Mumbai, Indi
Sarda, Kisan	Veermata Jijabai Tech. Inst. Mumbai, Indi
Yerudkar, Amol	Univ. OF SANNIC
Singh, Navdeep	Veermata Jijabai Tech. Ins
11:10-11:30	FrAT1.
Frequency Synchronisation of Islanded MicroGrids Using Robust Adaptation Over Lure Fo	
Bajaria, Pratik	VEERMATA JIJABAI Tech. Inst. MUMBA
Singh, Navdeep	Veermata Jijabai Tech. Ins
11:30-11:50	FrAT1.
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Nandanoori, Sai Pushpak	Iowa State Uni
Ebrahimi, Keivan	Iowa State Uni
Vaidya, Umesh	Iowa State Uni
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Dong, Yimeng	Univ. of Maryland, Coll. Par
Chopra, Nikhil	Univ. of Maryland, Coll. Par
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Swikir, Abdalla	Tech. Univ. Münche
Girard, Antoine	CNR
Zamani, Majid	Tech. Univ. Münche
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Chair: Sen, Shaunak	Indian Inst. of Tech. Delh
Co-Chair: Singh, Arun Kant	Indian Inst. of Tech. Kanpu
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Bhaumik, Shovan	Indian Inst. of Tech. Patn
Kumar, Kundan	Indian Inst. of Tech. Patn
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Detroja, Ketan	Indian Inst. of Tech. Hyderaba
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Design of Discrete-Time Kalman Filter Based Delay Compensator for Rhodium-103 SPND, pp. 48-53. Mutneja, Tarun

Homi Bhabha National Inst

Bhatt, Tarang	Bhabha Atomic Res. Center
Tiwari, Akhilanand Pati	Bhabha Atomic Res. Centre
Jain, Sanjay	Nuclear Power Corp. of India Limited
Nathani, Kamlesh	Nuclear Power Corp. of India Limited
Sen, Sandip Kumar	Nuclear Power Corp. of India Limited
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Kanagala, Subhash Babu	IIT Hyderabad
Detroja, Ketan	Indian Inst. of Tech. Hyderabad
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C, Kamali	National Aerospace Lab
N, Manikanta Babu	NATIONAL AEROSPACE Lab
Saraf, Amitabh	Aeronautical Develoment Agency
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Gautam, Suryakant	Homi Bhabha National Inst
Tamboli, Prakash K.	NPCIL
Patankar, Vaibhav H.	Bhabha Atomic Res. Centre (BARC)
Duttagupta, Siddhartha P	IIT Bombay
Roy, Kallol	BHAVINI
FrAT3	Video Conf. Room
Identification and Learning (Regular Session)	
Chair: Bhikkaji, Bharath	IIT Madras
Co-Chair: Challapalli, Niharika	Univ. of Texas, Dallas
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Pinnamaraju, Vivek Shankar	Indian Inst. of Tech. Madras
Tangirala, Arun K.	Indian Inst. of Tech. Madras
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Jha, Jitesh	
Kumar, Sandeep	IIT Bombay Indian Inst. of Tech. Bombay
Kumar, Sandeep Belur, Madhu N.	Indian Inst. of Tech. Bombay
Belur, Madhu N.	Indian Inst. of Tech. Bombay Indian Inst. of Tech. Bombay
Belur, Madhu N. 11:10-11:30	Indian Inst. of Tech. Bombay
Belur, Madhu N. 11:10-11:30 A Fast Algorithm for Compressive Sensing Using Binary Measurement Matrices, pp. 83-88.	Indian Inst. of Tech. Bombay Indian Inst. of Tech. Bombay FrAT3.3
Belur, Madhu N. 11:10-11:30 <i>A Fast Algorithm for Compressive Sensing Using Binary Measurement Matrices</i> , pp. 83-88. Lotfi, Mahsa	Indian Inst. of Tech. Bombay Indian Inst. of Tech. Bombay FrAT3.3 Univ. of Texas at Dallas
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Belur, Madhu N. 11:10-11:30 A Fast Algorithm for Compressive Sensing Using Binary Measurement Matrices, pp. 83-88. Lotfi, Mahsa Vidyasagar, Mathukumalli 11:30-11:50 A Reinforcement Learning Algorithm for Restless Bandits, pp. 89-94.	Indian Inst. of Tech. Bombay Indian Inst. of Tech. Bombay FrAT3.3 Univ. of Texas at Dallas The Univ. of Texas at Dallas FrAT3.4 Tata Inst. of Fundamental Res
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Belur, Madhu N. 11:10-11:30 A Fast Algorithm for Compressive Sensing Using Binary Measurement Matrices, pp. 83-88. Lotfi, Mahsa Vidyasagar, Mathukumalli 11:30-11:50 A Reinforcement Learning Algorithm for Restless Bandits, pp. 89-94. Borkar, Vivek S. Chadha, Karan 11:50-12:10 Topology Identification of Sparse Networks of Continuous Time Systems, pp. 95-100. Varanasi, Santhosh Kumar Jampana, Phanindra 12:10-12:30 On Amplitude-Timescale Constraints in a Pulse Generating Biomolecular Circuit, pp. 101-106	Indian Inst. of Tech. Bombay Indian Inst. of Tech. Bombay FrAT3.3 Univ. of Texas at Dallas The Univ. of Texas at Dallas FrAT3.4 Tata Inst. of Fundamental Res IIT Bombay FrAT3.5 Indian Inst. of Tech. Hyderabad IIT Hyderabad FrAT3.6 6.
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FrBT1 Robust and PID Control (Regular Session)	Outreach Auditorium
Chair: Mahindrakar, Arun	Indian Inst. of Tech. Madras
Co-Chair: Khan, Hadhiq	National Inst. of Tech. Srinaga
15:30-15:50	FrBT1.
Accelerated Simulation of a High-Fidelity DC-DC Buck-Boost Cor	
Khan, Hadhiq	National Inst. of Tech. Srinaga
Bazaz, Mohammad Abid	National Inst. of Tech
Nahvi, Shahkar Ahmad	Islamic Univ. of Science & Tech
15:50-16:10	FrBT1.2
Pre-Fuzzy-PID Controller for Effective Control of Electromagnetic	: Levitation System, pp. 113-118.
Gandhi, Ravi	PhD, Scholar, Nirma Univ
Adhyaru, Dipak	Professor & Head, Inst. Engineering, Nirma Univ
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Stabilization of RDIP Using Sliding Modes, pp. 119-124.	
Patil, Madhura	Coll. of Engineering Pune
Kurode, Shailaja	Coll. of Engineering, Shivajinagar, Pune INDIA
16:30-16:50	FrBT1.4
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Senthil Kumar, Ashwin Kumar	Madras Inst. of Tech. Univ
Kannan, Archana	Madras Inst. of Tech. Anna Univ
Santosh, Simi	Indian Inst. of Tech. Chennai, India
Manickam, Chidambaram	Indian Inst. of Tech. Madras
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Desai, Ranvir	SGGS Inst. of Engineering and Tech. Nanded
Patre, B. M.	SGGS Inst. of Engineering and Tech
Pawar, S. N.	SGGS Inst. of Engineering and Tech. Nandeo
17:10-17:30	FrBT1.6
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Soman, Rohan	IIT Kharagpu
Gopmandal, Falguni	Dept. of Electrical Engg., IIT Kharagpu
Ghosh, Arun	D
FrBT2	Seminar Room
Optimization and Optimal Control (Regular Session)	
Chair: Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpu
Co-Chair: Abraham, Mathew P	Indian Inst. of Tech. Bombay
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Multi-Objective Optimal Control of Biochemical Processes Using	Genetic Algorithms through ANN Assisted Reformulation, pp. 143-148.
Miriyala, Srinivas Soumitri	INDIAN Inst. OF Tech. HYDERABAD
Mitra, Kishalay	Indian Inst. of Tech. Hyderabad
15:50-16:10	FrBT2.2
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Mittal, Prateek	Indian Inst. of Tech. Hyderaba
Mitra, Kishalay	Indian Inst. of Tech. Hyderabad
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Challapalli, Niharika	Univ. of Texas, Dalla
Vidyasagar, Mathukumalli	The Univ. of Texas at Dallas
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On the Existence of Equilibria in Price-Coupling Games, pp. 160-	165.
Abraham, Mathew P	Indian Inst. of Tech. Bombay

Kulkarni, Ankur A.	Indian Inst. of Tech. Bombay
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Prathapaneni, Dimple Raja	lit Hyderabad
Detroja, Ketan	Indian Inst. of Tech. Hyderabad
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Malhotra, Shiv	INDIAN Inst. OF Tech. KANPUF
Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpu
Anand, Sandeep	INDIAN Inst. OF Tech. KANPUF
FrBT3	Video Conf. Room
Robotic and Vehicular Control (Regular Session)	
Chair: Sanyal, Amit	Syracuse Univ
Co-Chair: Pasumarthy, Ramkrishna	Indian Inst. of Tech. Madras
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Bansal, Kritika	National Inst. of Tech. Delh
Mukhija, Pankaj	National Inst. of Tech. Delh
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Chauhan, Abhisha	lit Bombay
Vyas, Pranjal	Indian Inst. of Tech. Bombay
Vachhani, Leena	Indian Inst. of Tech. Bombay
Maity, Arnab	Indian Inst. of Tech. Bombay
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Sanyal, Amit	Syracuse Univ
Dhullipalla, Mani Hemanth	Syracuse Univ
Viswanathan, Sasi Prabhakaran	Akrobotix LLC
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Saradagi, Akshit	Indian Inst. of Tech. Madras, Chenna
Menta, Sandeep	Indian Inst. of Tech. Madras
Gajbhiye, Sneha	Indian Inst. of Tech. Bombay
Mahindrakar, Arun	Indian Inst. of Tech. Madras
Banavar, Ravi N.	Indian Inst. of Tech
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Roy, Ananya	Indian Inst. of Tech. Delh
Nabi, Mashuq-un-	Indian Inst. of Tech
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Tracking and Stabilization of Mechanical Systems Using Reinforcement Learning, pp. 206-211. S, Bhuvaneswari	
	IIT Madra
S, Bhuvaneswari	IIT Madras Indian Inst. of Tech. Madras Indian Inst. of Tech. Madras

Technical Program for Saturday January 6, 2018

SaCT1 Adaptive Control and Nonlinear Systems (Regular Session)	Outreach Auditorium
Chair: Mahindrakar, Arun	Indian Inst. of Tech. Madra
Co-Chair: Karmakar, Arunava	Indian Inst. of Tech. Kanpu
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Deshmukh, Ankit	I.I.T Kharagpu
Venkatesh, M	I.I.T Kharagpu
Ray, Goshaidas	Indian Inst. of Tech
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MRAC and Modified MRAC Controller Design for Level Process Control, pp. 217-22	22.
Pawar, Rupali	Pravara Rural Engineering Coll. Lor
Parvat, Bhagsen	Pravara Rural Engineering Coll. Lon
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Time-Frequency Control of Linear Time-Varying Systems Using Forward Riccati Di	fferential Equation, pp. 223-228.
Basu, Biswajit	Trinity Coll. Dublir
Staino, Andrea	Alstom Traspor
14:30-14:50	SaCT1.4
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Mundla, Narasimhappa	Indian Inst. of Tech. Madras
Mahindrakar, Arun	Indian Inst. of Tech. Madra
Vitor C, Guizilini	Univ. of Syndney
Terra, Marco Henrique	Univ. of Sao Paulo at Sao Carlos
Samrat L, Sabat	Univ. of Hyderabad
14:50-15:10	SaCT1.5
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Kumar, Aravind	Indian Inst. of Tech. Madras
Ali, Shaikh Faruque	Indian Inst. of Tech. Madras
Friswell, Michael	Coll. of Engineering Swansea Univ
Arunachalakasi, Arockiarajan	IIT Madra
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Sinha, Mohit	Univ. of Minnesota
Florian, Dörfler	ETH
Johnson, Brian	National Renewable Energy Lat
Dhople, Sairaj	Univ. of Minnesota
SaCT2	Seminar Room
Process Control (Regular Session)	
Chair: Mitra, Kishalay	Indian Inst. of Tech. Hyderabad
Co-Chair: Prakash, Ravi	Indian Inst. of Tech. Kanpu
13:30-13:50	SaCT2.2
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Kataria, Gaurav	MNIT Jaipu
Singh, Kailash	MNIT Jaipu
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G Lloyds Raja, Lloydsraja	Indian Inst. of Tech. Patha
Ahmad Ali, Ali	Indian Inst. of Tech. Patna
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Panwar, Puneet	Bhabha Atomic Res. Centre, Mumbai and Indian Inst. of Te
Mukhopadhyay, Siddhartha	lit Kgr
Bhatt, Tarang	Bhabha Atomic Res. Cente
Tiwari, Akhilanand Pati	Bhabha Atomic Res. Centre
4:30-14:50	SaCT2.4
Multi-Objective Prioritized Control of a Semi-Batch Process with Multiple Feed a	
Markana, Anilkumar	Pandit Deendayal Petroleum Univ. Gandhinaga
Padhiyar, Nitin	Indian Inst. of Tech. Gandhinaga
Moudgalya, Kannan M.	I.I.T. Bomba
4:50-15:10	SaCT2.5
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Khandelwal, Shubham	Indian Inst. of Tech. Hyderabad
Detroja, Ketan	Indian Inst. of Tech. Hyderabad
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Sethi, Bimal Kanta	NATIONAL Inst. OF Tech
Jagannathan, Ramanuja Vinayak Dr. N., Sivakumaran	National Inst. of Tech. Tiruchirappall National Inst. of Tech
SaCT3	Video Conf. Room
Consensus and Cooperation (Regular Session)	
Chair: Dasgupta, Soura	Univ. of Iowa
Co-Chair: Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpu
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Sen, Arijit	IIT Kanpu
Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpu
Kothari, Mangal	Indian Inst. of Tech. Kanpu
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De, Souradip	INDIAN Inst. OF Tech. KANPUF
Sahoo, Soumya Ranjan Mahindrakar, Arun	Indian Inst. of Tech. Kanpu
	Indian Inst. of Tech. Madras
Wahi, Pankaj	IIT Kanpu
14:30-14:50	SaCT3.4
Generalized Cyclic Pursuit of Double-Integrator Agents, pp. 300-305.	INDIAN Inst. OF Tech. KANPUF
De, Souradip Sabaa Sauraya Baajaa	
Sahoo, Soumya Ranjan Wahi, Pankaj	Indian Inst. of Tech. Kanpu IIT Kanpu
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14:50-15:10 Economic Model Predictive Control of Building Energy Systems in Cooperative (SaCT3.5
Nagpal, Himanshu	Trinity Coll. Dublir
Basu, Biswajit	Trinity Coll. Dublir
Staino, Andrea	Alstom Traspor
SaDT1	Outreach Auditorium
Aerospace 1 (Regular Session) Chair: Pasumarthy, Ramkrishna	Indian Inst. of Tech. Madras
Chair: Fasunanny, Kanikisina Co-Chair: Karmakar, Arunaya	Indian Inst. of Tech. Kannu

Co-Chair: Karmakar, Arunava

Indian Inst. of Tech. Madras Indian Inst. of Tech. Kanpur

16:00-16:20	SaDT1.1
Two Stage Proportional Navigation Guidance Law for Impact Time Control, pp. 312-37	17.
Saleem, Abdul	Government Engineering Coll. Wayana
Ratnoo, Ashwini	Indian Inst. of Science
16:20-16:40	SaDT1.2
Autonomous Maneuvering of a Stratospheric Airship, pp. 318-323.	
D, Gobiha	Indian Inst. of Tech. Madras
Sinha, DR.Nandan kumar	lit Madras
16:40-17:00	SaDT1.3
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Kumar, Yajur	Manav Rachna International Univ
17:00-17:20	SaDT1.4
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Sasikumar, Vishnu Therayil	Indian Inst. of Space Science and Tech
Harsha, Simha	Indian Inst. of Space Science and Tech
H, Priyadarshan	Indian Inst. of Space Science and Tech
SaDT2	Seminar Room
Aerospace 2 (Regular Session)	
Chair: Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpu
Co-Chair: Kedarisetty, Siddhardha	lit Madra:
16:00-16:20	SaDT2.1
System Identification of a Small Scaled Helicopter Using Simulated Annealing Algorith	<i>hm</i> , pp. 335-339.
Biswas, Pranjal	Indian Inst. of Science
Balamuralidhar, Navaneethkrishnan	Indian Inst. of Science
Anand, Gaotham	Indian Inst. of Science
Omkar, S N	Indian Inst. of Science
16:20-16:40	SaDT2.2
Quaternion Based Adaptive Control for Package Delivery Using Variable-Pitch Quadre	<i>otors</i> , pp. 340-345.
Shastry, Animesh Kumar	Indian Inst. of Tech. Kanpu
Bhargavapuri, Mahathi	IIT Kanpu
Kothari, Mangal	Indian Inst. of Tech. Kanpu
Sahoo, Soumya Ranjan	Indian Inst. of Tech. Kanpu
16:40-17:00	SaDT2.3
A Novel Quad-Rotor Configuration Capable of Attitude Control through Center of Grav	vity Variation, pp. 346-351.
Kedarisetty, Siddhardha	lit Madras
17:00-17:20	SaDT2.4
Differential-Flatness and Control of Quadrotor(s) with a Payload Suspended through F	Flexible Cable(s), pp. 352-357.
Kotaru, Venkata Naga Prasanth	Carnegie Mellon Univ
Wu, Guofan	Carnegie Mellon Univ
Sreenath, Koushil	Univ. of California, Berkeley
SaDT3	Video Conf. Room
Networked Control (Regular Session)	
Chair: Bhat, Sanjay P.	Tata Consultancy Services Limited
Co-Chair: Baranwal, Mayank	Univ. of Illinois
16:00-16:20	SaDT3.
Implementing Sliding Mode Control of DC Servo Motor Over a Control Network, pp. 35	
Samantaray, Jagannath	Indian Inst. of Tech. Roorkee
16:20-16:40	SaDT3.2
CAN-Based Networked Path-Tracking Control of a 4WS4WD Electric Vehicle: Minimu	Im Sampling Period, pp. 363-368.
Singh, Arun Kant	Indian Inst. of Tech. Kanpu
Potluri, Ramprasad	IIT Kanpu

16:40-17:00

CAN-Based Networked Path-Tracking Control of a 4WS4WD Electric Vehicle: Maximum Sampling Period, pp. 369-374. Singh, Arun Kant Potluri, Ramprasad IIT Kanpur

SaDT3.3