

Work address

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Dr. Manasi Das

Objective

- To be associated with a reputed academic institution of engineering which provides professional development, valuable experiences and personal growth.
- To impart quality education among students
- To broaden the scope of Research in the institution

Experience

Research	Jadavpur University	RUSA 2- Post Doctoral Fellow	March 2019 – March 2020 (Strapdown Seeker Based Guidance)
	Jadavpur University	CSIR-Senior Research Fellow	July 2011 – July 2015 (Nonlinear State Estimation of Aerospace Systems)
Teaching	Dream Institute of Technology, Tkakurpukur	Associate Professor	December 2022-Till Date
	Indian Institute of Engineering, Science and Technology, (IEST), Shibpur	Temporary Faculty	October 2020- November 2022
	Adamas University, Jagannathpur, Kolkata	Assistant Professor	April 2017 – February 2019
	St. Thomas College of Engineering and Technology, Khidirpur, Kolkata	Assistant Professor	August 2015 – December 2016
	Bengal College of Engineering & Technology, Bidhan Nagar, Durgapur	Assistant Professor	August 2010 – June 2011.

Education

Ph D (2012-2017)	Jadavpur University.	<i>Thesis:</i> Fault Detection and State Estimation for Aerospace Systems. <i>Supervisors:</i> Prof. Tapan kumar Ghoshal, Prof. Smita Sadhu.	
ME (2008-2010)	Jadavpur University.	<i>Master of Control System Engineering.</i> <i>Master's Dissertation:</i> An approach towards History Based Weighted Average Voting Algorithm using Soft Dynamic Threshold. <i>Supervisor:</i> Prof. Samar Bhattacharya	8.55

GATE 2008		Electronics and Communication Engineering	90.35 percentile
B Tech. (2003-2007)	Murshidabad College of Engineering & Technology	Bachelor of Electronics & Communication Engineering. <i>Project on:</i> Remotely Programmable RTC-Interfaced Microcontroller for Multiple Device Control.	7.64

Achievement

- **Best Paper award** in *Second Michael Faraday IET India Summit 2013*.
- **Post-Doctoral Fellowship** award by **Rashtriya Uchchattar Shiksha Abhiyan (RUSA)** scheme of **Ministry of Human Resource Development**, Government of India in 2019.
- **Senior Research Fellowship** award given by **Council of Scientific and Industrial Research (CSIR)** in July 2011 for 4 years.
- **"Certificate of Outstanding Contribution in Reviewing"** awarded by Journal of the Franklin Institute
- **"Certificate of Reviewing"** awarded by Advances in Space Research and Journal of Process Control
- Total Citations: 103, h-index: 6, i10 index: 4 (Counted by Google Scholar)

Professional memberships

- IEEE Control Systems Society,
- IEEE Aerospace and Electronic Systems Society,
- IEEE Signal Processing Society
- IEEE Women in Engineering Membership

Technical Skills

- MATLAB
- Sci-LAB
- Xilinx

List of Publications

Journal Papers

1. Das Manasi, Sadhu Smita, Ghoshal Tapan Kumar, "Fault Detection and Isolation of Satellite Inertial Instrumentation Using Nonlinear Adaptive Filters," **Journal of Aerospace Information Systems**, vol. 12, no. 2, American Institute of Aeronautics and Astronautics (AIAA), pp. 284-289, 2015.
2. Das Manasi, Dey Aritro, Sadhu Smita, Ghoshal Tapan Kumar, "Adaptive Central Difference Filter for Nonlinear State Estimation," **IET Science Measurement and Technology**, vol. 9, no. 6, pp. 728-733, 2015.
3. Dey Aritro, Das Manasi, Sadhu Smita, Ghoshal T. K., "Adaptive Divided Difference Filter for Parameter and State Estimation of Nonlinear Systems," **IET Signal Processing**, vol.9, issue 4, pp. 369-376, 2015.
4. Das Manasi, Sadhu Smita, Ghoshal T. K., "An adaptive sigma point filter for nonlinear filtering problems," International Journal of Electrical, Electronics and Computer Engineering, Special Edition for Best Papers of Michael Faraday IET India Summit-2013, vol. 2, no. 2, pp. 13-19, 2013.

Conference Papers

5. Dutta Agniva, Das Manasi, "ECG Denoising using Adaptive Unscented Kalman Filter", in Proc. of IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2022), Gwalior, 2022
6. Mukherjee M., Das Manasi, Sadhu Smita, "Q-Adaptive Extended Kalman Filter for Nonlinear Systems with Unknown Noise Statistics," in Proc. of INDICON 2018 - 15th Edition of the IEEE India Council International Conference, December 2018, Tamil Nadu, India.
7. Das Manasi, Sadhu Smita, Ghoshal T. K., "Spacecraft Attitude & Rate Estimation by an Adaptive Unscented Kalman Filter," in Proc. of International Conference on Control, Instrumentation, Energy and Communication (CIEC14), pp. 46-50, 2014.

8. Das Manasi, Sadhu Smita, Ghoshal T. K., "Fault Detection and Isolation using an Adaptive Unscented Kalman Filter," in Proc. of Third International Conference on Advances in Control and Optimization of Dynamical Systems, IFAC, Kanpur, India, pp. 326-332, 2014.
9. Dey Aritro, Das Manasi, Sadhu Smita, Ghoshal T. K., "Adaptive Gauss Hermite Filter for Parameter and State Estimation of Nonlinear System," in Proc. of 11th International Conference on Informatics in Control, Automation and Robotics, Vienna, Austria, September 2014, pp. 583-589.
10. Das Manasi, Dey Aritro, Sadhu Smita, Ghoshal T. K., "Joint Estimation of States and Parameters of a Reentry Ballistic Target using Adaptive UKF," in Proc. of Fifth International Symposium on Electronic System Design, Surathkal, India, 2014, pp. 99-103.
11. Das Manasi, Dey Aritro, Sadhu Smita, Ghoshal T. K., "Adaptive Unscented Kalman Filter at the Presence of Non-additive Measurement Noise" in Proc. of 12th International Conference on Informatics in Control, Automation and Robotics, Colmar, France, pp. 614-620, 2015
12. Dey Aritro, Das Manasi, Sadhu Smita, Ghoshal T. K., "Adaptive Unscented Information Filter for Multiple Sensor Fusion", in Proc. of Michael Faraday IET International Summit, Kolkata, pp.541-545, 2015.
13. Das Manasi, Bhattacharya S., "A Modified History Based Weighted Average Voting With Soft-Dynamic Threshold," in Proc. of International Conference on Advances in Computer Engineering, Bangalore, pp. 217-222, 2010.

Seminar, Workshop and Industrial Training Attended

Electrical Engineering Department,
Jadavpur University

Seminar on: Control and Instrumentation in Aerospace

Department of Applied Physics,
University of Calcutta (2nd July to 3rd July,
2012)

Workshop on: Vistas of Advanced Control Theory with
Aerospace Applications.

C.E.T.E. Kolkata
(10th July to 28th July, 2006)

Training on: Programmable Logic Controller (PLC) &
Supervisory Control and Data Acquisition System (SCADA).
Projects: (1) A.C. Motor Control, (2) Traffic Light Control.

All India Radio, MSD
(22nd June to 5th July, 2006)

Training on: Studio and Transmission System.

Course topics

Signals Processing, Control System, Circuit Theory & Networks, Machine Learning, Artificial Intelligence

Referees

Dr. Tapan Kumar Ghoshal
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Honorary Emeritus Professor, Electrical Engineering
Department, Jadavpur University

Dr. Smita Sadhu
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Professor, Electrical Engineering Department,
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