National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty / Staff Members

Name: Dr. Rahul Kumar Sharma
Designation: Assistant Professor
Office Address: Room No. 204A,
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Fields of Specialization: Fractional-Order Systems, Sliding Mode Control

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Dr. Rahul Kumar Sharma was born in Dhanbad, India. He received his B.Tech. degree in Electronics and Instrumentation Engineering from Asansol Engineering College, Asansol, West Bengal, India in 2014, M.Tech. degree in Control and Instrumentation Engineering from Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, India in 2016, and Ph.D. degree in Electrical Engineering (Systems Engineering) from Indian Institute of Technology (BHU), Varanasi, India in 2020. From 2020 to 2021, he worked as Research Associate in the Department of Electrical Engineering, Indian Institute of Technology (BHU), Varanasi, India. From 2021 to 2022, he worked as Faculty Member in the Department of Instrumentation and Control Engineering, National Institute of Technology, Tiruchirappalli, India where he is currently working as Assistant Professor. His research interests include Fractional-Order Systems and Sliding Mode Control.

1. Employment Profile

Job Role	Employer	From	To
Assistant Professor	National Institute of Technology, Tiruchirappalli, India	2022	Present
Faculty Member	National Institute of Technology, Tiruchirappalli, India	2021	2022
Research Associate	Indian Institute of Technology (BHU), Varanasi, India	2020	2021

2. Academic Qualifications

Examination	Board / University	Year	Division
Ph.D.	Indian Institute of Technology (BHU), Varanasi, India	2020	First
M.Tech.	Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, India	2016	First
B.Tech.	Asansol Engineering College, Asansol, West Bengal, India	2014	First

3. Membership of Learned Societies

Type of Membership	Organization	Membership No.
Student Member	Institute of Electrical and Electronics Engineers (IEEE)	94815158

4. Details of Academic Work

(i) Courses Taught at Postgraduate and Undergraduate levels

Course Name
Control System Design
Essentials of Control Engineering
Computational Techniques in Control Engineering
Industrial Instrumentation
Industrial Measurements
Control Engineering Laboratory
Industrial Automation and Process Control Laboratory
A. I. and Robotics Laboratory

(ii) Projects Guided at Postgraduate level

Name of Student	Thesis Title	Role
Md Imtiyaz Uddin	Design and Implementation of Backstepping Controller for Twin-Rotor MIMO System	Co-Supervisor

5. Publications

(A) Book Chapter

Author(s)	Title of Chapter	Editors	Book	Publisher	Year
S. Kamal and Rahul Kumar Sharma	Sliding Mode Control based Tracking of Non-Differentiable Reference Functions	A.K. Mehta and B. Bandyopadhyay	Emerging Trends in Sliding Mode Control - Theory and Applications	Springer	2020

(B) Journal Articles

Author(s)	Title of Paper	Journal	Volume	Pages	Year
X. Xiong, Rahul Kumar Sharma, S. Kamal, S. Ghosh, Y. Bai and Y. Lou	Discrete-Time Super-Twisting Fractional-Order Observer with Implicit Euler Method	IEEE Transactions on Circuits and Systems II: Express Briefs	69 (6)	2787-2791	2022
Rahul Kumar Sharma, X. Xiong, S. Kamal and S. Ghosh	Discrete-Time Super-Twisting Fractional-Order Differentiator with Implicit Euler Method	IEEE Transactions on Circuits and Systems II: Express Briefs	68 (4)	1238-1242	2021
S. Kamal, Rahul Kumar Sharma, T. N. Dinh, M. S. Harikrishnan and B. Bandyopadhyay	Sliding Mode Control of Uncertain Fractional-Order Systems: A Reaching Phase-Free Approach	Asian Journal of Control	23 (1)	199-208	2021
S. Kamal, X. Yu, Rahul Kumar Sharma, J. Mishra and S. Ghosh	Non-Differentiable Function Tracking	IEEE Transactions on Circuits and Systems II: Express Briefs	66 (11)	1835-1839	2019

(C) Conferences Proceedings

Author(s)	Title of Paper	Title of the Proceedings	Year
S. Kumar, Rahul Kumar Sharma and S. Kamal	Adaptive Super-Twisting Guidance Law with Extended-State Observer	47th International Conference of the IEEE Industrial Electronics Society	2021