



Biranchi Narayan Rath, Ph.D.

Designation: Sr. Assistant Professor

Department: Department of Electronics & Communication Engg.

(JOINED THE INSTITUTE IN JUNE 2009)

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RESEARCH INTERESTS

- ✓ Unmanned Vehicles
- ✓ Control System
- ✓ Process Control
- ✓ Machine Learning and its application

Academic Qualifications

Ph.D in Control & Automation, NIT Rourkela, Odisha

M. Tech in Control & Automation, NIT Rourkela, Odisha.

B. Tech in Applied Electronics and Instrumentation, SIT, Bhubaneswar, Odisha.

Specialisation: Electronics Engineering

Teaching Experience/Industrial Experience/Research Experience

Teaching Experience : 13 years

Research Experience : 7 years

PUBLICATIONS

JOURNAL & CONFERENCES:

JOURNALS:

1. **Biranchi Narayan Rath**, and Bidyadhar Subudhi, "A robust model predictive path following controller for an Autonomous Underwater Vehicle," Ocean Engineering 244 (2022): 110265.

CONFERENCES:

1. **B. N. Rath**, and B. Subudhi, "A New Back stepping Control Design Method for Autonomous Underwater Vehicle in Diving and Steering Plane," in 10 Conferences (TENCON) 1987.
2. **B. N. Rath**, and B. Subudhi, "Adaptive Nonlinear Model Predictive Controller based on Polynomial form NARMAX model for Autonomous Underwater Vehicle", Proceedings of the 15th IEEE India Council International Conference (INDICON), Coimbatore, 16-18 December 2018

BOOK CHAPTERS

1. **B. N. Rath**, and B. Subudhi, "An Extreme Learning based Adaptive Control Design for an Autonomous Underwater Vehicle Cognitive Informatics, Computer Modelling and Cognitive Science, Elsevier.

PROJECTS:

1. **Sponsoring Agency:** SERB, DST
Role :PrincipallInvestigator
Title of Project:Discrete-point control based Adaptive Active Noise regulation System implementation using Deep-Learning regression techniques
Amount of grant: Rs.18,30000/-
Period: 13December 2021-12December 2023
Status: Not completed