## **BIO-DATA**

# SRINIVASA REDDY N Scientist

**Robotics & Automation Division** 

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## **EDUCATION**

- Academy of Scientific and Innovative Research (2011)
  M. Tech in Mechatronics
- Birla Institute of Technology and Science, Pilani (BITS-Pilani) (2008)
  B.E.(Hons.) in Mechanical Engineering

#### **EXPERIENCE**

 CSIR-Central Mechanical Engineering Research Institute (CMERI), Durgapur, India (from 2011 to till date)

Scientist, Robotics & Automation Division

## **RESEARCH PROJECTS**

Involved (ongoing/completed) with the following projects:

- 1. "Autonomous Underwater Robotics (UnWaR)", CSIR Network Project (Ongoing)
- 2. "Toward Developing Biomimetic Underwater Swimming Robot for Autonomous Surveillance", Sponsored by Department of Science and Technology (Ongoing)
- 3. "Ejection Mechanism for deployment of Launcher and Mechanism for opening/closing of payload cavity door in AMCA: feasibility study", sponsored by Aeronautical Development Agency (Completed)

### **Some Recent Publications**

- 1. Reddy, N. S., Sen, S., & Shome, S. N. (2016, January). An investigation on the performance of an oscillating flat plate fin with compliant joint for underwater robotic actuation. In 2016 IEEE First International Conference on Control, Measurement and Instrumentation (CMI) (pp. 201-205). IEEE.
- 2. Reddy, N. S., Sen, S., Kumar, D., & Shome, S. N. (2015, July). Caudal fin load characteristics with different motion patterns toward developing biorobotic fish-fin actuator. In Proceedings of the 2015 Conference on Advances In Robotics (p. 18). ACM.
- 3. Pandey, J., Reddy, N. S., Ray, R., & Shome, S. N. (2013, August). Biological swimming mechanism analysis and design of robotic frog. In 2013 IEEE International Conference on Mechatronics and Automation (pp. 1726-1731). IEEE.
- 4. Pandey, J., Reddy, N. S., Ray, R., & Shome, S. N. (2013, December). Multi-body dynamics of a swimming frog: A co-simulation approach. In Robotics and Biomimetics (ROBIO), 2013 IEEE International Conference on (pp. 842-847). IEEE.
- 5. Anish Dasari, Reddy, N. Srinivasa, "Forward and Inverse Kinematics of a Robotic Frog", IEEE Proceedings of 4th International Conference on Intelligent Human Computer Interaction, Kharagpur, India, December 27-29, 2012.
- 6. Reddy, N. S., Ranjit Ray, and S. N. Shome. "Modeling and simulation of a jumping frog robot." 2011 IEEE International Conference on Mechatronics and Automation. IEEE, 2011.

## **PROFESSIONAL ACTIVITIES**

Faculty member of Academy of Scientific and Innovative Research.