



Santhakumar Mohan

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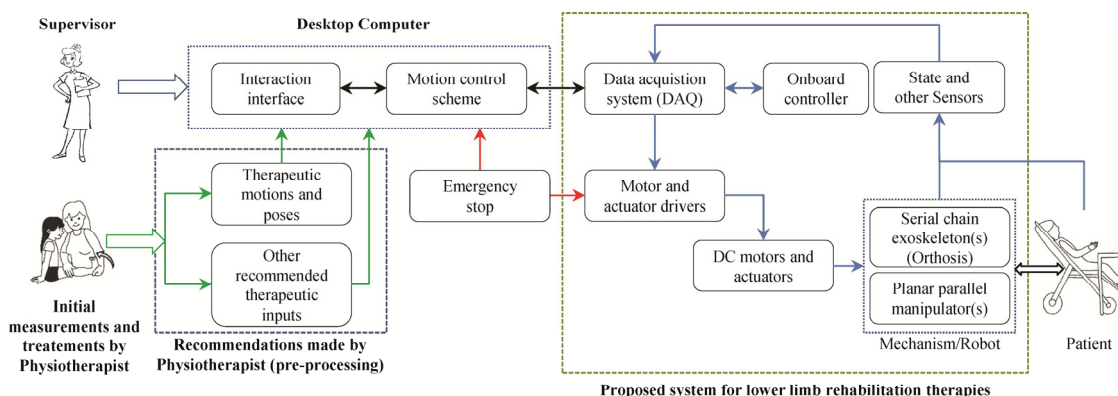
Research Interests

- Robotics and Motion Control
- Mobile and Underwater Robots
- Medical Assistive Devices and Rehabilitation Robots
- Nonlinear Motion Control

Brief Summary of Research

Santhakumar has published more than 100 research papers in refereed international journals and conferences, supervised and graduated 2 PhD Students and successfully completed 4 research projects amounting INR 180 Lacs and has 3 ongoing research projects worth of INR 220 Lacs as a Principal Investigator. Furthermore, he has received the outstanding young Scientist for the year 2014 from Korea Robotics Society, European Master on Advanced Robotics Plus (EMARO+) fellowship (2019) and Alexander von Humboldt (AvH) Fellowship (2017).

Overview of Lower Limb Rehabilitation Robot Development



Projects (Full list of projects: <https://santhakumarm.wixsite.com/crciiti>)

- “Development of a hybrid robotic system based on a passive orthosis and an active parallel manipulator for the lower limb rehabilitation”, Russian Science Foundation (RSF), Russia, approximately Rs. 190 Lacs, June 2019 – June 2021.
- “Bio-inspired Hybrid Underwater Vehicle for Ocean Observations”, Science and Engineering Research Board (SERB), India, Rs. 30.91 Lacs, June 2019 – June 2021.

Recent Publications (Full list of publications: <https://santhakumarm.wixsite.com/crciiti>)

- Ravi Prakash, Laxmidhar Behera, **Santhakumar Mohan** and Jagannathan Sarangapani, “Dynamic Trajectory Generation and a Robust Controller to Intercept a Moving Ball in a Game Setting,” *IEEE Transactions on Control Systems Technology*, in press, April 2019.
- Jagadeesh Kadiyam and **Santhakumar Mohan**, “Conceptual design of a hybrid propulsion underwater robotic vehicle with different propulsion systems for ocean observations,” *Ocean Engineering*, 182, June 2019.