

Openings for Project Positions

Project objectives

Research in and development of mechanisms for quality of service (QoS) in wireless networks, particularly in the context of industrial and smart factory applications. We are working on 5G and 5G+ technologies, Wi-Fi, and convergence of 5G and Wi-Fi. Specific, immediate, tasks are to develop a comprehensive Radio Access Network (RAN) scheduler for private 5G networking, with seamless QoS handover, even across wireless technologies. Our work approach is to propose or derive algorithms, to study them by simulation and implementation on an over-the-air test-beds in our lab, and to theoretically establish various properties of the algorithms.

Expectations from the Project Engineers

Graduate or post-graduate degree in ECE (Electrical Communication Engineering, or Electrical and Computer Engineering) or Computer Science. Preference will be given to applicants with the following knowledge and experience.

- Wireless communications and networking
 - Familiarity with the concepts, protocols, and standards, via coursework or project work
 - Exposure to basic concepts in machine learning and reinforcement learning
 - The ability to read and understand research articles and standard documents
- Experience in using Matlab, along with familiarity in C/C++/Python
- Working knowledge of the Linux OS and networking software

Advantages of working in a short term contract position in IISc?

- Opportunity to work on the frontiers of technology, with state-of-the-art equipment, and acquire industry-relevant skills
- Opportunity to work with leading researchers from IISc
- Combination of systems research, software development, and experimentation
- Opportunities to participate in various lectures and workshops in IISc
- Potential for academic publications, enhancing higher study prospects

Application process:

A CV, of no more than two pages, including educational qualifications with GPA/CPA/percentage (as applicable), relevant courses taken, and projects done, list of publications and patents (if any) career objectives, name, address, phone number, and email address, should be sent to: anandsvr@iisc.ac.in / shivamv@iisc.ac.in with a copy to sushmas@iisc.ac.in