In the Name of God

Call for recruitment of postdoctoral researchers

Institute for Convergence Science and Technology

In line with the research and technology goals of the Institute for Convergence Science and Technology, it is planned to accept a number of postdoctoral researchers for the following axes. Qualified applicants (possessing a doctorate degree in related fields and full-time attendance requirements) should send their application along with a copy of their resume, abstracts from the project or the field of research interest in the mentioned fields to icst@sharif.edu by 6 December 2022 or the office of the institute (phone: +982166164123).

Research axes in the field of Nanoscience and Nanotechnology:

- Application of two-dimensional advanced materials and polymer nanocomposites in the fields of energy, water, environment and health
- Manufacturing and application of nanodevices including nanosensors in the above fields
- Interdisciplinary fields of nano and cognitive sciences, biotechnology, data science and quantum sciences and technologies

Research axes in the field of Biosciences and Technology:

- Fields related to smart drugs and drug release systems in the fields of diagnosis and treatment
- Fabrication of micro and nano motors, microfluidic systems and biosensors
- Applications of tissue engineering in the field of health
- Personalized medicine and improved imaging and tracking methods
- Isolation of proteins, identification of important analides in biological samples

Research axes in the field of Information Systems and Data Science:

- Data science in systems and synthetic biology, precision medicine and drug design
- Analysis of neural, economic, audio, text and video data
- Security, confidentiality and anonymization
- Analysis of telecommunication networks and blockchain
- Autonomous and connected cars

Research axes in the field of Cognitive Sciences:

- Development of neuroscience imaging and data processing methodology
- Social robots and virtual reality systems in education and rehabilitation
- Circuits and brain processes of memory and reward learning and attention in primates
- Making tools and electrodes for recording nerve signals
- Cognitive robotics, the neural mechanism of decision-making and object and face recognition
Research axes in the field of Quantum Science and Technology:

- Quantum communications and telecommunications
- Sensors and quantum networks
- Quantum signal processing
- Optical quantum computing
- Quantum biology