Malaviya National Institute of Technology Jaipur
Department of Computer Science and Engineering

Re-Advertisement for Junior Research Fellow

SERB-DST Project: "SWARD -Secure next-generation Wireless Access RaDio technology for smart cities in India"

Dated: May 08, 2019

Applications are invited for the temporary posts of **Junior Research Fellow (JRF)** for SERB, DST, Govt. of India, Project **"SWARD -Secure next-generation Wireless Access RaDio technology for smart cities in India"** in the Department of Computer Science and Engineering. The desirable minimum essential and desirable qualifications for the project posts are as follows. Interested candidates should submit their resume highlighting

1) Essential Educational Qualifications – Year of passing, percentage, board/university, examination passed (from X and XII onwards)
2) Address of communication, phone number, mobile number (if any) and email address.
3) Professional Experience and one professional reference not related.
4) Familiarity with Programming Languages
5) Hardware Proficiency

The essential and desirable qualifications for the project associates are as follows:

S.No.	Description	Essential qualification
1.	Junior Research Fellow (DST-SWARD-RBB): **One Number** **Rs.31000/=** per month + 16% HRA initially for one year extendible up to the end of the project on yearly basis	**Minimum Qualifications:** B.E./B.Tech. in Computer Science and Engg./ Computer Engg./ Information Technology/ Communication and Computer Engg./ Electronics and Communication Engg. M.E./M.Tech. in Computer Science and Engg./ Computer Engg./ Software Engg./ Information Technology/ Information Security/ VLSI with first class. GATE qualification, The candidates will be required to handle lab work of latest Networking environment and work in embedded/IoT systems laboratory. The candidate shall be exposed for handling the labs and will be encouraged to contribute in research work related with the project. The selected candidates shall be encouraged to register to PhD/already registered candidates can also apply.

Resumes along with the certificates (i.e. photo copies) can be posted to or left in person with the following address

1) Principal Investigator (DST-SWARD)
Department of Computer Science and Engineering
Malaviya National Institute of Technology
JLN Marg, Malaviya Nagar
Jaipur – 302017

(Super scribe the envelope with DST-SWARD-JRF-2019**)**

2) email-id to: sward.mnit@gmail.com (Scanned copies of necessary certificates needs to be submitted).

Suitable candidates will be contacted via contact numbers. Department has the discretion to restrict the number of candidates to be called for the interview to a reasonable limit on the basis of qualification and experience higher than the minimum prescribed above.

Important Dates:

Submission of application on prescribed format through email or by post	May 08, 2019 till May 22, 2019
No separate interview letter shall be sent for the shortlisted candidates. They will be informed through their email ID and also by phone. Information shall be communication dates	May 23-24, 2019
Date of Test/Interview/Presentation	May 30, 2019

Overview of the Project:

Digital India rapid growth creating lot of opportunities, at the same time new technological challenges related to wireless technologies are many. The smart city environment required to use software oriented artificial intelligence based wireless communication with enhanced security features. Here, the next-generation wireless technologies have the flexibility in the software of wireless physical layer operations. It will have the promising technology to provide broadband services to the millions of the people in the future. However, government regulated bodies certified the hardware to generate the Radio Frequency (RF) signals in conventional radios, which means RF signals are tightly regulated unlike the Software Defined Radio (SDR). The software component of the next-generation wireless access communication technologies can be exploited with the wide-range of unauthorized RF signals. The security of the wireless radio technologies can be compromised in the critical wireless systems. The existing security mechanisms wouldn't possible to prevent the innumerable of security issues, and that may be targets of the malware. The objectives of the project are to design a secure next-generation wireless radio access mechanism to regulate and mange the critical wireless systems in the smart city environment. The primary objective of this project is to systematically and rigorously categorize and analyze coexistence restrictions of cross-layer designs in the next-generation wireless networks.