

INSTITUTE FOR DEVELOPMENT AND RESEARCH IN BANKING TECHNOLOGY

(Established by Reserve Bank of India)

Advertisement No: 20/2021 - 22

Dated: March 17, 2022

Engagement of Junior Research Fellow

The Institute for Development and Research in Banking Technology (IDRBT), established by Reserve Bank of India, is the premier Institute of Banking Technology in the country. The Institute spearheads efforts in providing state-of-the-art technologies for the Banking and Financial Sector by interfacing Applied Research and Development, Academics, Executive Education, Practice and Consultancy so as to continuously enable the technology transformation of the Banking and Financial Sector in India and make it future-ready.

The Institute is carrying out a SERB-funded research project on "Developing Reverse Engineering Resilient Hardware Accelerators during Architectural Synthesis". The objective of the project is to design a reverse engineering attack resilient Hardware Accelerator (HA) by developing robust algorithms to enhance the reverse engineering complexity.

In order to contribute to this major research project, applications are invited from candidates for the following temporary project positions:

POSITION: JUNIOR RESEARCH FELLOW

i. No. of Positions: One

- ii. Primary Responsibility:
 - To design, develop, and demonstrate different hardware security algorithms.
 - To design and implement a secure application-specific processor.
 - To synthesize and simulate design during High-level Synthesis (HLS) and Register Transfer Level (RTL).
 - To carry out any other responsibilities assigned by the Institute

iii. Eligibility:

(a) Educational Qualifications

First-class regular BE/BTech/ME/MTech in CSE/IT/ECE or any other directly related streams from a recognised Institute with a consistently good academic record throughout.

- Qualified CSIR-UGC NET or GATE in Computer Science or Electronic & Communications.
- Preference will be given to candidates interested in pursuing their Ph.D.

(b) Essential Skills

- The candidate should have hands-on knowledge of HLS and RTL tools.
- Knowledge in RTL synthesis algorithms, datapath or high-level synthesis.
- Knowledge in FPGA architecture, VHDL and Verilog based design.
- Strong communication skills and a quick learner.

(c) Desired Skills

- Strong background in computer algorithms and data structures.
- Strong background in high-level programming languages (JAVA, Python).
- Hands-on experience of FPGA-based prototyping or emulation of complex SoCs
- Good understanding of the issues involved in ASIC to FPGA RTL preparation
- Experience with design, verification, and validation Knowledge of Digital Design, VHDL/Verilog, Synthesis, Simulation, and FPGA architectures such as Xilinx Spartan 7 and Altera Cyclone V.
- Age Limit: 28 Years.
- iv. Term: Till December 2023.
- v. Compensation: All-inclusive consolidated compensation of Rs. Thirty-Eight Thousand Four Hundred and Forty per month.

Rules and Regulations for all this position:

- 1. The above position is purely temporary and on a contract basis under the project mode.
- 2. There is no scope whatsoever for further continuation, extension of term, absorption, regularisation, permanency, in the Institute under any circumstances
- 3. The completion of the period of contract / project will not confer any right whatsoever for further continuation, extension of term, regularisation, absorption at the Institute.
- 4. All educational qualifications must have been necessarily obtained by pursuing the courses on a full-time regular basis from recognised universities/institutions. If grades are awarded instead of marks, candidates should clearly indicate their numerical equivalent.
- 5. Relevant experience gained after the qualifying degree will only be taken into consideration.
- 6. Candidates should satisfy themselves about their eligibility for the position being applied for. Mere fulfilment of eligibility does not guarantee shortlisting for Selection Process.
- 7. Candidates should apply in the format provided on the Institute's website.
- 8. Incomplete applications / not in the prescribed format / without all the required documents, will be rejected and no correspondence will be entertained by the Institute.
- 9. Candidates for these positions should enclose attested scanned copies of their Mark sheets and Certificates right from Matriculation onwards.

- 10. The candidature will be considered on the strength of the information declared in the Application. If at any stage, it is found that any information furnished is false / incorrect, the candidate has clandestine antecedents/background or if according to the Institute, the candidate does not satisfy the eligibility criteria, her/his candidature / appointment is liable to be cancelled / terminated at any point in time including after appointment, in addition to any disciplinary action as may be necessary.
- 11. In case of any inadvertent mistake in the process of selection which may be detected at any stage even after the issue of appointment letter, the Institute reserves the right to modify / withdraw / cancel any communication made to the candidates.
- 12. The Institute reserves the rights to screen and call only such candidates as are found primafacie suitable for being considered
- 13. The Institute also reserves the right to restrict the candidates called for to the selection process to a reasonable number on the basis of qualifications, level and relevance of experience higher than the minimum prescribed herein and the requirements of the Institute. Thus just fulfilling the prescribed conditions would not entitle one to be called for the Selection Process. The Institute also reserves the right of rejecting any or all the applications without assigning any reasons therefore.
- 14. The Institute reserves the right to fill or not to fill any or all the positions advertised without assigning any reason.
- 15. In all matters regarding Eligibility, Qualification, Skills, Experience, Compensation, Contract Term, Selection Process, Assessment, Prescribing Minimum Qualifying Standards in Selection Process, and Communication of Result, the Institute's decision shall be final and binding on all the candidates and no correspondence shall be entertained in this regard.
- 16. Only shortlisted applicants will be contacted. No correspondence will be entertained from candidates regarding postal delays, conduct & result of selection process and reasons for not being called for the selection process.
- 17. Selected candidates should undertake to abide by all the rules and regulations pertaining to their retention as also the rules and regulations of the Institute.
- 18. The crucial date for determining the eligibility criteria for all candidates in every respect shall be the prescribed closing date for submission of application.
- 19. Interested candidates may forward a Covering Letter and Filled-in application along with the copies / scanned copies of all the required documents to "The Human Resources Department, IDRBT, Castle Hills, Road No.1, Masab Tank, Hyderabad – 57" or by e-mail to <u>irf@idrbt.ac.in</u> so as to reach the Institute latest by <u>April 11, 2022</u>.
