

భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్ भारतीय प्रौद्योगिकी संस्थान हेदराबाद Indian Institute of Technology Hyderabad

Indian Institute of Technology Hyderabad Kandi - 502 284, Telangana, India

Date: 12.12.22

## Rolling Advertisement- Applications Invited for Research Position (Post Doctoral Fellow/ Research Associate / Research Assistant) and Developer Position (Project Staff)

1.

| Positions        | Post-Doctoral Research Fellowship (CSE/ECE/EEE)  |
|------------------|--|
| Type of Position | This position is for 06 Months, with extension subject to performance.   |
| Salary           | Consolidated pay Rs. 55,000 per month (negotiable)   |
| Eligibility      | <ul> <li>Ph.D. with BE/BTech/MSc/Equivalent in CSE/ECE/EEE with relevant research/industrial experience and publication in reputed journals/conferences. Candidates who have submitted the thesis and are waiting for thesis defense are also encouraged to apply.</li> <li>Candidates should have good academic records and communication skills.</li> <li>Candidates should not have published in any predatory journals.</li> </ul> |

| Experience             | 0-2 Years of relevant experience post-Ph.D.  |
|------------------------|--|
| Job Description        | <ul> <li>Development of security requirements and security test<br/>procedure</li> <li>Working with other stakeholders of the research project</li> <li>Identification of vulnerabilities and development of<br/>security solutions in any of the domain areas.</li> <li>Publish the research results in top-level conferences and<br/>journals</li> <li>Work with other research students in the development of<br/>security solutions in any of the domain areas.</li> </ul> |
| Domain Areas           | <ul> <li>5G Security</li> <li>System Security</li> <li>IoT Security</li> <li>Cloud Security</li> </ul>   |
| Selection<br>Procedure | Candidates will be shortlisted based on the eligibility criteria,<br>academic record, and relevant experience. Only shortlisted<br>candidates will be intimated through email for the interview by the<br>selection committee. Merely meeting the criteria may not guarantee<br>a call for an interview. The position will be left vacant, and a new<br>advertisement with an extended date will be given if no suitable<br>candidate is found.                                |

2.

| Positions        | Research Associate (CSE/ECE/EEE)                                       |
|------------------|--|
| Type of Position | This position is for 06 Months, with extension subject to performance. |

|                           | Candidates meeting the eligibility of CSE/EE Ph.D.<br>programs of IIT Hyderabad can apply while working on this<br>project.  |
|---------------------------|--|
| Salary                    | Consolidated pay Rs. 35,000 per month (negotiable)   |
| Eligibility               | <ul> <li>M.Tech in CSE/ECE/EEE with relevant<br/>research/industrial experience. Publication in reputed<br/>journals/conferences will be given preference.</li> <li>Candidates should have good academic records<br/>throughout and good writing skills.</li> </ul>  |
| Experience                | 0-2 Years of relevant experience post M.Tech   |
| Job Description           | <ul> <li>Development of security requirement, security test procedure</li> <li>Working with other stakeholders of the research project</li> <li>Identification of vulnerabilities and development of security solutions in any of the domain areas.</li> <li>Work with other researchers in the team in the development of security solutions and publish the research results.</li> </ul> |
| Domain Areas<br>Selection | <ul> <li>5G Security</li> <li>System Security</li> <li>IoT Security</li> <li>Cloud Security</li> <li>Candidates will be shortlisted based on the eligibility criteria,</li> </ul>  |
| Procedure                 | academic record, and relevant experience. Only shortlisted<br>candidates will be intimated through email for the interview by<br>the selection committee. Merely meeting the criteria may not<br>guarantee a call for an interview. The position will be left<br>vacant, and a new advertisement with an extended date will be<br>given if no suitable candidate is found.                 |

| Positions                              | Research Assistant (CSE/ECE/EEE)   |
|--|--|
| Type of Position                       | This position is for 06 Months, with extension subject to performance.   |
|  | Candidates meeting the eligibility of CSE/EE M.Tech (RA)<br>programs of IIT Hyderabad can apply without a GATE<br>score while working on this project.   |
| Salary                                 | Consolidated pay Rs. 25,000 per month (negotiable)   |
| Eligibility                            | <ul> <li>B.Tech in CSE/ECE/EEE with relevant<br/>research/industrial experience. Publication in reputed<br/>journals/conferences will be given preference.</li> <li>Candidates should have good academic records<br/>throughout and good writing skills.</li> </ul>  |
| Experience                             | 0-2 Years of relevant experience post-B.Tech   |
| Job Description                        | <ul> <li>Development of security requirements, and security test procedure</li> <li>Working with other stakeholders of the research project</li> <li>Identification of vulnerabilities and development of security solutions in any of the domain areas.</li> </ul>  |
| Domain Areas<br>Selection<br>Procedure | <ul> <li>5G Security</li> <li>System Security</li> <li>IoT Security</li> <li>Cloud Security</li> <li>Cloud Security</li> <li>Candidates will be shortlisted based on the eligibility criteria, academic record, and relevant experience. Only shortlisted candidates will be intimated through email for the interview by the selection committee. Merely meeting the criteria may not guarantee a call for an interview. The position will be left vacant, and a new advertisement with an extended date will be</li> </ul> |

| Positions                                       | Project Staff (Developer) (CSE/ECE/EEE)  |
|---|--|
| Type of Position                                | This position is for 06 Months, with extension subject to performance.   |
|   | Candidates meeting the eligibility of CSE/EE M.Tech (RA)<br>programs of IIT Hyderabad can apply without a GATE<br>score while working on this project.   |
| Salary  | Consolidated pay of Rs. 35,000 to 50,000 based on the experience and performance   |
| Eligibility                                     | <ul> <li>B.E/B.Tech in CSE/ECE/EEE with relevant research/industrial experience. Publication in reputed journals/conferences will be given preference.</li> <li>Candidates should have good academic records throughout and good writing skills.</li> </ul>  |
| Experience                                      | <ul> <li>Min 2 years of hands-on work experience on either of         <ul> <li>the Telecommunication Systems</li> <li>Mobile Technologies</li> <li>IP Networking</li> </ul> </li> <li>Work Experience in a telecom operator's network will be         <ul> <li>an asset.</li> </ul> </li> </ul>  |
| Primary Skill Set                               | <ul> <li>Hands-on experience with open source and commercial test tools like Vulnerability Analysis, Penetration Tool, Source Code Analyzer, Binary Analysis, and Protocol Fuzzer. Should be thorough with packet capture and analysis.</li> <li>Sufficient exposure to standards of 3GPP, ETSI, ITU-T, IEEE, CC, IETF, NIST/FIPS, etc.</li> <li>Proficiency in scripting and programming         <ul> <li>Expertise on Linux</li> </ul> </li> </ul> |
| Secondary Skill Set (at<br>least on one domain) | <ul> <li>On 5G:</li> <li>Expert knowledge on 4G/5G</li> <li>Knowledge on cryptography.</li> <li>Database security</li> </ul>   |

|                         | • Experience in IPSec, TLS, etc   |
|-------------------------|---|
|                         | <ul> <li>Virtualization:         <ul> <li>Knowledge on Cloud Security</li> <li>Knowledge on Container Security</li> <li>Knowledge on ETSI's NFV security</li> <li>Experiences on Virtualization</li> </ul> </li> <li>Should be able to analyze and generate standards &amp; test cases for each of the vulnerabilities in virtualization ( in all framework)</li> </ul>   |
|                         | <ul> <li>Operating System:</li> <li>Strong Knowledge on OS security fundamentals         <ul> <li>Hands-on experience in OS hardening</li> <li>Exposure to OS security standards defined by CIS, CERT, etc</li> <li>Should be able to identify security vulnerabilities in OS and should be able to generate standards and test cases for each of the vulnerabilities</li> </ul> </li> </ul>  |
|                         | <ul> <li>IoT:</li> <li>Hands-on experience on embedded system security         <ul> <li>Relevant IoT security standards</li> <li>Conversant with/hands-on experience in IoT development with like Arduino / Raspberry Pi / Free RTOS             <ul> <li>Skills in Linux Customization</li> <li>Proficiency in scripting in any of the Bash / Python / PERL / RUBY</li> </ul> </li> </ul> </li> </ul>                                |
| Job Description         | <ul> <li>Responsibility: Should contribute to the development of test cases and test schedules for the security requirements of identified ICT products</li> <li>Should be able to execute test cases independently in a real and simulated environment and able to produce clear test results with all the evidence.</li> <li>Work with stakeholders and willing to work either at IIT Hyderabad or DoT Bangalore campus.</li> </ul> |
| Selection<br>Procedure, | Candidates will be shortlisted based on the eligibility criteria,<br>academic record, and relevant experience. Only shortlisted<br>candidates will be intimated through email for the interview by<br>the selection committee. Merely meeting the criteria may not<br>guarantee a call for an interview. The position will be left  |

| vacant, and a new advertisement with an extended date will be |
|---|
| given if no suitable candidate is found.                      |

## How to Apply:

Candidates, who fulfill the eligibility criteria, should fill out the below google form. Once submitted the details, we will verify and get back to you if your application meets the criteria.

Google Form: https://forms.gle/oL8dVPpVCQRH28Wb6