



Advertisement for Project Associate-II in a Department of Science and Technology Project

Applications are invited from Indian citizens for one post of Project Associate-II in a Department of Science and Technology (DST), funded project (IITM/DST-ICPS/VD/251) at IIT Mandi.

Title of the Research Project: A game theoretic approach involving experimentation and computational modelling of hacker's decision using deception in cyber security.

Project details: The growing threat of cyber-attacks on critical cyber infrastructure reveals the urgent need for finding methods that enhance network security. Currently, there are several security solutions available to defend against cyber-attacks, but very few of these solutions can prevent zero-day cyber-attacks. Deception, the act of making someone believe in something that is not true, may provide a promising real-time solution against cyber-attacks. Deception may involve interaction between two parties, a target, and a deceiver, in which the deceiver effectively causes the target to believe in a false description of reality. To create deception for cyber-defense, security experts have used honeypots, servers that are fake and that mimic real servers, for gathering intelligence about hackers.

The project aims to systematically evaluate the effectiveness of deception as a strategy against cyber-attacks. Another outcome is the development of cognitive computer algorithms that mimic hackers' decisions in attacking networked computer systems. These algorithms, once developed, will be directly useful by public, and private enterprises in testing deception and other defense mechanisms against simulated hackers.

Minimum qualifications: BTech/MS/MCA or equivalent degree with minimum 60% marks in Computer Science or relevant subject area with 2-years of work experience OR MTech or equivalent degree.

Desirable: Candidate may have a valid NET/GATE score; publications in cybersecurity areas are desirable; Other desirable qualifications include: Knowledge of programming languages like Python, web technologies like HTML, JavaScript, PHP, and MySQL, and data analyses; good communication skills; and, keen to learn new things.

Joining date: As soon as possible.

Position: Project Associate-II

Salary: Up to INR 28,000

Duration: 1-year or till the end of the project.

Candidates meeting the qualifications and experience may submit their details and CV online via the following link (before 27th June 2022):

<https://forms.gle/ws2zF7XLU4Vbhv5>

Applicants who meet the screening criteria would be called for an online interview.. The date and time of the interview along with the online link will be shared by email with candidates before the interview.

The decision of the selection committee regarding the interview logistics and selection process for the post will be final.

The selection committee reserves the right to fill or not fill the advertised post.

For any additional clarifications/information, please contact Dr. Varun Dutt (PI) at varun@iitmandi.ac.in