Project Description:

Trust Lab wishes to do a very large scale education outreach in the domain of "Trust/Security". Towards this, we need to manage a few ed-tech platforms that will help us run the courses at scale. This would include the following:

- Learning Management System that will host course material in the form of videos and quizzes and discussion forums etc.
- Lab platform: That will help conduct security labs. This will support both server-side labs as well as client-side labs (in all three operating systems, Linux, MAC and Windows).
- Assessment platforms: To manage question repositories and conduct objective/subjective exams at scale

Position Title: Project Software Engineer

Duration : 1 year

No. of Position(s): 2

Location : Powai, Mumbai

Reporting to: PIC

Salary Band: PR-O1 (33600-67200) Out of Campus Allowance additional up to Rs 6000

Work description:

The main work description will include the following, but not limited to:

- 1. Software development for features (both backend and front end, full stack development)
- 2. Fixing bugs
- 3. Server/system maintenance/administration
- 4. Functional and performance testing
- 5. Code/system optimization
- 6. UI design, usability testing
- 7. Code documentation
- 8. Team lead/mentorship.

Required technical skills:

We require technical background and expertise in at least one of (a) Django-python, (b) React-JS front-end, (c) System administration preferably as many of these as possible.

Familiarity with (a) Cloud computing concepts/tools (virtualization, containers, message-queues, docker, kubernetes, kafka, AWS/Azure etc), (b) Devop tools (Git, Jenkins, Terraform, Selenium, Ansible, ELK stack etc), (c) Network/OS fundamentals, (d) System security fundamentals/tools (identity/access management, secure storage etc) also highly preferable.

People having experience of 2-3 years will be given preference.

ShortListing Process

- 1. Programming Assignments: For this
 - a. Please visit <u>https://garuda.bodhi.cse.iitb.ac.in/</u> and sign up for an account. **Sign up with the same full-name/email as in your application** (this is very important and will let us identify your account). After you sign-in, enrol in this course: <u>https://garuda.bodhi.cse.iitb.ac.in/courseware/course/663/</u>
 - b. In the left panel, assignments are under Course Content → Assignments → Programming Labs
 - (https://garuda.bodhi.cse.iitb.ac.in/courseware/course/663/assignments/)
 - c. Complete at least 5 and as many as you can before the application deadline.
- Identify a prominent project you have worked on in the past and record up to a 5 min video (< 20MB). The video can demonstrate this project, along with some explanations. If the demonstration is difficult, explain the project in your words with any slides etc. The video should clearly touch upon the following:
 - a. A crisp and clear problem statement
 - b. A solution approach towards the problem. This can show demo, explanation slides etc
 - c. Challenges faced and how you overcame them
 - d. What technical skill sets/learning did you pick as part of the project
- 3. Once you finish (1) and (2), upload your video, along with a few other details at https://forms.gle/ioUo2ywkdyMEBHYh6. The deadline for filling this form is the same as the application deadline
- 4. Note: you have to submit the application form on the DRF portal of IIT Bombay <u>https://acr.iitb.ac.in/recruitment/</u>. In addition, you also have to fill the form in step 3. Only those who do both by the application deadline, will be considered for the interview.
- 5. The position is temporary for a period of 1 year and tenable only for the duration of the project. The selection committee may offer lower or higher designation and lower or higher salary depending upon the experience and performance of the candidate in the interview.