

**Software Job Openings to work in I-STEM Project (<https://www.istem.gov.in/>)**

**Send your detailed Curriculum Vitae to [shruthir@iisc.ac.in](mailto:shruthir@iisc.ac.in) with a copy to [national-coordinator@istem.co.in](mailto:national-coordinator@istem.co.in)**

**Your email subject line should be :I-STEM Software Job for JD1/JD2/JD3 depending on which of the 3 job openings (given below) you are applying for. The deadline to receive your applications is 30<sup>th</sup> November 2023**

### **JD1 : Program Manager (Software Manager - Portal Development and Testing)**

#### **Overview:**

We are looking for a dynamic and experienced Software Manager to join our team and lead the development, maintenance, and testing of our large and complex web portal. We are looking for a dynamic and experienced Software Manager to join our team and lead the development, maintenance, and testing of our large and complex web portal. The ideal candidate will have a strong background in both software development and quality assurance, and be able to ensure that the portal meets high standards of functionality, performance, and reliability.

Specifically, we are looking for someone with the following skills and experience:

- Experience managing a portal and migration plan
- Vast experience in PHP, Codeigniter framework, Python, MySQL, MongoDB, HTML, CSS, React.js, Node.js, JavaScript, and Redux
- Strong background in both software development and quality assurance
- Ability to ensure that the portal meets high standards of functionality, performance, and reliability

#### **Key Responsibilities:**

- Lead and manage a team of developers working to enhance and maintain the portal.
- Collaborate with the development team to ensure code quality, adherence to coding standards, and timely delivery of features.
- Conduct code reviews and provide constructive feedback to the development team.
- Develop and implement a comprehensive testing strategy, including unit testing, integration testing, and system testing.
- Oversee the creation and execution of test plans to ensure the portal meets functional and performance requirements.
- Work closely with QA engineers to identify and resolve bugs, ensuring a high level of software quality.
- Manage and optimize databases, including MySQL and MongoDB, to ensure efficient data storage and retrieval.
- Collaborate with the database administration team to implement best practices for data security, integrity, and scalability.
- Develop project plans, set milestones, and allocate resources effectively to ensure timely project delivery.

- Monitor project progress, identify potential risks, and implement mitigation strategies to keep projects on track.
- Collaborate with product managers, UI/UX designers, and other stakeholders to understand business requirements and translate them into technical specifications.
- Foster a collaborative and communicative environment between development, testing, and other relevant teams.

### **Skill Requirements:**

- Technical Skills:
  - Proficiency in PHP and Python programming languages.
  - Experience with MySQL and MongoDB database management.
  - Strong understanding of web development frameworks and best practices.
  - Experience with React.js, Node.js, and JavaScript.
- Development and Testing Experience:
  - Proven experience in both software development and testing roles.
  - Familiarity with testing tools and methodologies.
- Leadership and Communication:
  - Excellent leadership and team management skills.
  - Strong communication skills to convey technical information to non-technical stakeholders.
- Problem-Solving:
  - Ability to analyze complex problems and implement effective solutions.

### **Education and Experience:**

- Bachelor's/Master's degree in Computer Science, Information Technology/Science, Electronics, Mechanical, Physics, Mathematics, Statistics, Computer Applications or a related field.
- 10+ years of relevant experience in software development and testing roles.

### **Benefits:**

- Opportunities for professional development and training
- Collaborative and innovative work environment

***Consolidated Monthly salary (including HRA) : 1,00,000 INR to 1,75,000 INR***

## **JD2 : Senior Facility Technologist (Senior Software Engineer)**

### **Overview:**

We are seeking a skilled and dynamic Senior Software Engineer to join our team, specializing in portal development and testing. The successful candidate will play a crucial role in the design, implementation, and testing of our large and intricate web portal. If you possess a wealth of experience in React.js, Node.js, JavaScript, Redux, and related technologies, and are adept at ensuring high standards of functionality and performance, we invite you to be part of our innovative team.

### **Key Responsibilities:**

- Collaborate with cross-functional teams to design, develop, and maintain portal features.
- Utilize expertise in React.js, Node.js, JavaScript, and Redux to contribute to the enhancement and optimization of the web portal.
- Conduct thorough code reviews, providing constructive feedback to ensure code quality and adherence to coding standards.
- Implement and execute comprehensive testing strategies, covering unit testing, integration testing, and system testing.
- Work closely with QA engineers to identify and address software bugs, ensuring high-quality deliverables.
- Optimize and manage databases, including MySQL and MongoDB, for efficient data storage and retrieval.
- Collaborate with database administration teams to implement best practices for data security, integrity, and scalability.
- Contribute to project planning, set milestones, and allocate resources effectively for timely project delivery.
- Monitor project progress, identify risks, and implement mitigation strategies to keep projects on track.
- Communicate effectively with product managers, UI/UX designers, and other stakeholders to translate business requirements into technical specifications.

### **Skill requirement:**

#### Technical Skills:

- Proficiency in React.js, Node.js, JavaScript, and Redux.
- Strong understanding of web development frameworks and best practices.

#### Development and Testing Experience:

- Proven experience in both software development and testing roles.
- Familiarity with testing tools and methodologies.

#### Problem-Solving:

- Ability to analyze complex problems and implement effective solutions.

**Education and Experience:**

- Bachelor's/Master's degree in Computer Science, Information Technology/Science, Electronics, Mechanical, Physics, Mathematics, Statistics, Computer Applications or a related field.
- 5+ years of relevant experience in software development and testing roles.

**Benefits:**

- Opportunities for professional development and training
- Collaborative and innovative work environment

***Consolidated Monthly salary (including HRA) : 50,000 INR to 1,00,000 INR***

## **JD3 : Facility Technologist (QA Test Engineer)**

### **Overview:**

We are seeking a talented and detail-oriented QA Test Engineer to join our dynamic team. The ideal candidate will have a strong background in software testing, with expertise in PHP, Python, MySQL, MongoDB, React.js, Node.js, and JavaScript. As a QA Test Engineer, you will play a crucial role in ensuring the quality, reliability, and performance of our web applications.

### **Key Responsibilities:**

#### ***Test Planning:***

- Collaborate with development teams to understand project requirements and design comprehensive test plans.

#### ***Test Execution:***

- Perform functional, integration, and system testing to ensure the software meets specified requirements.
- Conduct regression testing to identify and address software defects.

#### ***Automated Testing:***

- Develop and execute automated test scripts using tools like Selenium or similar frameworks.
- Implement and maintain automated testing frameworks to increase efficiency.

#### ***Database Testing:***

- Validate data integrity and accuracy through testing of MySQL and MongoDB databases.
- Identify and troubleshoot database-related issues.

#### ***Web Development Knowledge:***

- Utilize a strong understanding of web development frameworks and best practices to ensure the quality of web applications.
- Test web applications developed in React.js, Node.js, and JavaScript.

#### ***Defect Tracking:***

- Document and track software defects, providing detailed information for developers to facilitate resolution.

#### ***Collaboration:***

- Collaborate with cross-functional teams, including developers, product managers, and UI/UX designers, to ensure a thorough understanding of project requirements.

#### ***Continuous Improvement:***

- Contribute to the improvement of testing processes and methodologies.
- Stay updated on industry best practices and emerging trends in software testing.

## **Skill Requirements :**

### ***Technical Skills:***

- Proficiency in PHP and Python programming languages.
- Experience with MySQL and MongoDB database management.
- Strong understanding of web development frameworks and best practices.
- Experience with React.js, Node.js, and JavaScript.

### ***Testing Experience:***

- Proven experience in software testing, including functional, integration, and regression testing.
- Familiarity with automated testing tools and frameworks.

### ***Communication:***

- Excellent verbal and written communication skills.
- Ability to collaborate effectively with cross-functional teams.

### **Education and Experience:**

- Bachelor's/ Master's degree in Computer Science, Information Technology/Science, Electronics, Mechanical, Physics, Mathematics, Statistics, Computer Applications or a related field.
- 2+ years of relevant experience in QA testing roles.

### **Benefits:**

- Opportunities for professional development and training.
- Collaborative and innovative work environment.

***Consolidated Monthly salary (including HRA) : 40,000 INR to 53,000 INR***