

# TATA INSTITUTE OF SOCIAL SCIENCES V.N. Purav Marg, Deonar, Mumbai 400 088 (A Deemed University under Section 3 of the UGC Act,

### 1956)

### ADVT/ TISS/ADMN/CETE/July/2021

### 22<sup>nd</sup> July 2021

The **Tata Institute of Social Sciences** (www.TISS.edu), established 1936 is a deemed to be University, fully funded by the University Grants Commission, Government of India. TISS is a Grade I University with NAAC score of 3.89/4 and NIRF 2020 rank of 34 among Indian Universities and 57 overall. With campuses at Mumbai (main) and off-campuses at Tuljapur, Guwahati and Hyderabad, TISS offers over 50 Post Graduate programmes, 18 Doctoral programmes, and 3 Under Graduate programmes in a range of socially relevant inter-disciplinary and applied social science disciplines, and over 30 BVoc programmes. Freedom and autonomy shape the positive work ethos and culture of the Institute and facilitate strong linkages between teaching, research, field action and policy engagement. The Institute encourages and supports researchers to engage in foundational, applied, field and action-oriented research, and nurtures research collaborations nationally and internationally, with a commitment to creating a just society through education, generation of knowledge and field action initiatives.

The Centre of Excellence in Teacher Education (CETE) (formerly Centre of Education, Innovation and Action Research) is an Independent Centre at TISS Mumbai which was established in 2015 to engage with and promote innovation in school curriculum, teacher education and higher education curriculum and pedagogy. The Centre incubates and promotes innovations that address the need to raise quality and standards and relevant to the developing world, and the innovative use of new technologies and media. The Centre was awarded the UNESCO-King Hamad Prize for Excellence in the Use of ICTs in Education in 2018. The Centre is actively engaged in research, development, teaching, field action/action research and advocacy and offers opportunities for national and international collaboration, innovation and excellence in teaching and research. The Centre offers MA Education, BEd MEd (Integrated, NCTE recognised) and PhD in Education. It offers short term, blended and online courses and programmes for teachers and teacher educators and education administrators The Centre is active in research and is engaged in collaboration with national and (www.tissx.edu). international academic institutions. The Centre is recipient of seed funding from the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, and the Tata Trusts and receives support from CSR and foundations to achieve its objectives.

The Centre is looking to recruit highly motivated and qualified professionals and researchers to staff its multidisciplinary teams and contribute to its projects and activities at Mumbai Campus.

Technology team			
Sr. No.	Position	No. of Position	Location
(1)	Software Developer (Front-end)	1	Mumbai
(2)	Senior Software Developer (Back-end)	1	Mumbai
(3)	Software Test Engineer	1	Mumbai
(4)	Systems Administrator and DevOps	1	Mumbai
Partnerships and communication			
(5)	Communications Associate	1	Mumbai

### Summary of Positions:

Details of each position are provided below.

### How to apply:

### **Application process and interview**

- **1.** Candidates are requested to apply online through the link **(Apply now)** provided along with this advertisement on the Institute website <u>www.tiss.edu</u>.
- **2.** Candidates are required to take a print of acknowledgement of online application and keep it for future reference.
- 3. Short-listed candidates will be informed over e-mail to appear for the online interview.

**Application fee:** The application fee of Rs 1000/- to be paid online. The SC/ST/PWD candidates are required to pay fees of Rs. 250/- if they attach the required certificate to the online application form. The women candidates are waived from the payment of application fees. The application will be valid only on receipt of the application fee for those who are required to pay. Fees once paid shall not be refunded under any circumstances.

### **Other conditions**

- The Institute reserves the right to relax qualification of the candidate based on the work experience and to relax age in the case of persons already holding comparable positions in a University/Research Institution of repute
- The Institute reserves the right to invite persons for interview who may not have applied for as per the above procedure and not fill up the vacancy advertised
- Since applications received may be short listed, merely possessing the prescribed qualifications and the requisite experience would not entitle a person to be called for interview
- The post is unreserved, but candidates belonging to reserved category can apply No queries or correspondence regarding issue of call letter for interview/selection of candidates for the post will be entertained at any stage and canvassing in any form is strictly prohibited and will lead to the candidate being debarred from consideration for the post
- The candidate under employment must bring 'No Objection Certificate' from their employer to appear for presentation/interview
- No TA/DA is payable for appearing for the interview
- In case of any inadvertent error in the advertisement and in the process of recruitment, which may be detected at any stage, even after issue of appointment order, the Institute reserves the right to modify/withdraw/cancel any communication made to the candidate(s)

Last date to receive applications:8th August 2021Tentative dates for interview:12th August to 17th August 2021Suggested date of joining:As early as possible

**Project Leader** 

# **Detailed description of the positions**

### 1. Software Developer (Front-end) – One Position

You will work with the developer team, centre faculty, teams such as content and project implementation teams at the centre – right from the requirements stage to release of the learning platforms, digital interactive, dashboards and websites.

### Key Responsibilities

- Life cycle aspects of UI/UX for various learning platforms, digital interactives, dashboards and websites including requirement gathering, programming, testing and release management
- Work with various teams at the centre for requirement gathering, seek feedback and proactively find innovative solutions to various UI/UX needs across teams
- Creating and maintaining comprehensive code repositories and project documentation
- Participate in Scrum meeting, discussions, conference calls and work closely and proactively with team members under the guidance of seniors

### **Desired Profile/Skills**

- Comfort with the standard front-end technologies and desire to learn new technologies
- Proven experience with UI/UX development using HTML5, CSS and JavaScript
- Thorough understanding and experience of developing progressive web apps with responsive design frameworks such as Django, Bootstrap, Foundation, ReactJS, Node.JS, JQuery, AngularJS and other frameworks like Ajax
- Experience with Open Source modes of development on Linux variants, docker and virtual environments, Ability to do code management with Git GitHub and GitLab
- An understanding of back-end technologies Python and SQL/NoSQL databases.
- Excellent understanding of UX principles, usability aspects, web accessibility guidelines and a good sense of aesthetics
- Being a considerate and cheerful team player with ability to tap into the other members of the technology team and their experience to solve technology issues and help others when needed
- Should be an organized, passionate and goal-oriented person who understands what various technology projects have in common, and their strategic role in how the CETE technology efforts can be primed for success
- Should be able to work well under pressure and be comfortable with change and complexity in dynamic environments, be able to estimate efforts and deliver with stringent timelines
- Accent on (always) improving his/her own and the teams' skills
- Research orientation and the ability to scribe documentation in terms of tech reports and research briefs, Ability to learn and grow with the organization

### **Qualifications**

- Applicants must be Engineers or Equivalent preferably with computer science / IT background
- Prior exposure to Educational Technologies is a plus

### <u>Experience</u>

- 1+ years of relevant experience in a software industry
- SDLC life cycle experience from development to testing and release

**Duration:** One year (extendable based on project need and performance)

**Remuneration:** Gross monthly remuneration for the position is in the range of Rs. 30,000-40,000 per month, commensurate with qualification and experience.

# 2. Senior Software Developer (Back-end) – One Position

You will work with the developer team, centre faculty as well as other teams such as content and project implementation teams at the centre – right from the requirements stage to release of the learning platforms, digital interactives, dashboards and websites.

# Key Responsibilities

- Life cycle aspects of one or more of the following: Backend development of python-django stack, working with data and dashboards etc for various learning platforms, digital interactives, dashboards and websites including requirement gathering, programming, testing and release management
- Work with various teams at the centre to gather requirements, seek feedback and proactively find innovative solutions to various full-stack needs across teams
- Creating and maintaining comprehensive code repositories and project documentation
- Hand Holding and mentoring the interns from time to time who could be part of independent programmes
- Participate in Scrum meeting, discussions, conference calls and work closely and proactively with team members under the guidance of seniors

### **Desired Profile/Skills**

- In depth knowledge of backend technologies, comfort with the general front-end technologies, and the ability to work with new technologies
- Proven experience with one or more of the Languages (Python, PHP, Ruby) and progressive web app development frameworks such as Django, Rails/Sinatra
- Designing and leveraging databases based on RDBMS such as MySQL, postgres, MongoDB, elasticsearch, JSON
- Thorough understanding of REST and ability to create and use RESTful APIs
- Awareness of backend tools such as Paperclip, Refile, Carrierwave
- Good exposure to one or more of: HTML5, JavaScript; ability to leverage various libraries for Javascript, such as ReactJs, Node.js, Jquery, AngularJS and other frameworks like Ajax
- Exp. of Open Source modes of development–Linux variants, docker & virtual environments
- Ability to do code release management and documentation with Git GitHub and GitLab
- Excellent understanding of UX principles, usability aspects and web accessibility guidelines
- Good communication abilities with diverse teams and ability to use tech platforms for updates, discussions
- Being a considerate and cheerful team player with ability to tap into the other members of the technology team and their experience to solve technology issues and help others when needed
- Ability to understand the requirements, document SRS, plan and execute the work
- Should be an organized, passionate and goal-oriented person who understands what various technology projects have in common, and their strategic role in how the CETE technology efforts can be primed for success
- Should be able to work well under pressure and be comfortable with change and complexity in dynamic environments, be able to estimate efforts and deliver with stringent timelines
- Research orientation and the ability to scribe documentation in terms of tech reports and research briefs, Accent on (always) improving his/her own and the teams' skills
- Exposure to Open edX technology stack will be a plus

# **Qualifications**

- Applicants must be Engineers or Equivalent preferably with computer science/IT background
- Experience of full stack will be a plus
- Prior exposure to Educational Technologies is a plus

### <u>Experience</u>

- 5+ years of relevant experience in a software industry
- Experience in agile methodology of software development

**Duration:** One year (extendable based on project need and performance)

**Remuneration:** Gross monthly remuneration for the position is in the range of Rs. 50,000-60,000 per month, commensurate with qualification and experience.

### 3. Software Test Engineer- One Position

You will work with the developer team, centre faculty as well as other teams such as content and project implementation teams at the centre – right from the requirements stage to release of the learning platforms, digital interactives, dashboards and websites.

### Key Responsibilities

- Ownership of the testing cycle aspects of various learning platforms, EdTech tools, dashboards, websites, mobile apps and software packages including automation, scripting, debugging, testing and delivery
- Work with various teams at the centre to gather requirements, seek feedback and proactively find innovative solutions alongwith developers
- Support teams at the centre, on-campus and remote, for IT services and infrastructure maintenance, troubleshooting and liasoning with service providers
- Creating and maintaining comprehensive code repositories and project documentation
- Participate in Scrum meeting, discussions, conference calls and work closely and proactively with team members under the guidance of seniors

### **Desired Profile/Skills**

- Ability to understand the functional requirements, translating them to test cases and keeping communication channels open both ways
- Comfort with the general front-end technologies, Understanding of UX principles, usability aspects and web accessibility guidelines, and ability to work with new technologies
- Proven experience of test case automation and bug tracking with frameworks/tools such as Selenium and Cucumber
- Comfort with one or more programming/scripting languages HTML5, python, shell
- Experience with Open Source modes of development on Linux variants, docker and virtual environments, ability to work with Git GitHub and GitLab
- Working knowledge of computer hardware and software and debugging skills to troubleshoot common issues
- Being a considerate and cheerful team player with ability to tap into the other members of the technology team and their experience to solve technology issues and help others when needed
- Should be an organized, passionate and goal-oriented person who understands what various technology projects have in common, and their strategic role in how the CETE technology efforts can be primed for success
- Should be able to work well under pressure and be comfortable with change and complexity in dynamic environments, be able to estimate efforts and deliver with stringent timelines
- Good communication skills with diverse teams and ability to use tech platforms for updates, discussions, Accent on (always) improving his/her own and the teams' skills
- Research orientation and the ability to scribe documentation in terms of tech reports and research briefs
- Willingness to work and accept new responsibilities and challenges as per the need of organization

### **Qualifications**

- Applicants must be Engineers or Equivalent preferably with computer science / IT background
- Prior exposure to Educational Technologies is a plus

### <u>Experience</u>

- 1+ years of relevant experience in a software industry
- Experience in agile methodology of software development

**Duration:** One year (extendable based on project need and performance)

**<u>Remuneration</u>**: Gross monthly remuneration for the position is in the range of Rs. 30,000/- to 40,000/- per month, commensurate with qualification and experience.

### 4. Systems Administrator and DevOps - One Position

You will work with the developer team, centre faculty as well as other teams such as content and project implementation teams at the centre – right from the requirements stage to release of the learning platforms, digital interactives, dashboards and websites.

# Key Responsibilities

- Sys/network related overall tasks: Administration, hosting, provisioning, maintenance, operations & support
- Ownership of CETE data centre both physical and cloud including security, credentials, user base management, Work in harmony with the Data center of the host organization TISS
- Life cycle aspects of building, packaging, delivering the software packages for the online and offline learning platforms, EdTech tools and websites
- Ensure 99.99% uptime for all the web services and device mechanisms for backups, fallback, health check, monitoring and analytics
- Support teams at the centre, on-campus and remote, for IT services and infrastructure maintenance, troubleshooting and liasoning with service providers
- Participate in Scrum meeting, discussions, conference calls and work closely and proactively with team members under the guidance of seniors

# **Desired Profile/Skills**

- Reasonable exposure to DevOps and Full-stack development related parameters and issues
- Demonstrable experience with open source based systems such as Linux, Systems administration, virtual servers, Git & container / docker based systems building and packaging installers and patches
- Excellent experience in bash/shell scripting, exposure to at least one cloud platform AWS/GCP/Azure, significant experience with networks, web hosting, troubleshooting and allied matters
- Should have knowledge of industry standards around monitoring, alerting, high availability, auto-scaling etc
- Process based approach towards maintaining digital assets like backup regimens, failproofing, hardware health and capacity monitoring, traffic and usage analysis, software process monitoring
- Working knowledge of computer hardware and software and debugging skills to troubleshoot common issues
- Good communication skills with diverse teams and ability to use tech platforms for updates, discussions, accent on (always) improving his/her own and the teams' skills
- Being a considerate and cheerful team player with ability to tap into the other members of the technology team and their experience to solve technology issues and help others when needed
- Should be able to work well under pressure and be comfortable with change and complexity in dynamic environments, be able to estimate efforts and deliver with stringent timelines
- Research orientation and the ability to scribe documentation in terms of tech reports and research briefs, should be an organized, passionate and goal-oriented person

### **Qualifications**

- Applicants must be Engineers or Equivalent preferably with computer science / IT background
- Prior exposure to Educational Technologies is a plus
- Systems Administration/System Engineer certification in Unix is preferable though not necessary

### <u>Experience</u>

- 4+ years of relevant experience in software industry
- Hands-on experience in Docker, Jenkins, Kubernetes

**Duration:** One year (extendable based on project need and performance)

**Remuneration:** Gross monthly remuneration for the position is in the range of Rs. 35,000/- to 40,000/- per month, commensurate with qualification and experience.

### 5. Communications Associate – One position

You will work closely with the partnerships team, Centre faculty, and TISS website team to garner visibility for the centre in the print media and all possible virtual platforms.

### Key Responsibilities

- Develop communication strategies for the Centre
- Creating awareness for the Centre and its activities on multiple platforms with targeted communication
- Creation of high-quality communication content for external communication especially on social media along-with design team
- Team engagement with all teams/Project units of the Centre (both internal and external) to identify relevant opportunities to build the Centre's brand
- Create engaging storylines and copy for the Centre's projects and activities
- Manage the creation and publication of the Centre's newsletter
- Manage the Centre's webpage and its updation
- Maintain a repository of media coverage and all communication (print, online and virtual)
- Liasoning and leveraging TISS PR arm for the Centre
- Creation of brochures and other collaterals as required.

### **Desired Profile/Skills**

• The ideal candidate has excellent written and verbal skills, is comfortable in English, Hindi and preferably Marathi, is self-motivated and dynamic and a team player with multi-tasking abilities. Knowledge of design and publishing software is an added advantage

**Qualification:** Masters in Communications / Journalism or related field **Experience:** 5-7 years' experience working in similar roles preferably for Education Institutions

**Duration:** One year (extendable based on project need and performance)

**<u>Remuneration</u>**: Gross monthly remuneration for the position is in the range of Rs. 45,000/- to 50,000/- per month, commensurate with qualification and experience.