#19-07 - Senior Software Engineer

TERC, a non-profit dedicated to improving STEM education, is seeking a senior software engineer to join a dynamic team working to create two online, highly interactive communities both funded by the National Science Foundation. We are seeking a person who will work on-site with a team of seven that includes another senior software engineer, content managers, researchers, and Principal Investigators. We are located in a historic factory building between Porter & Davis Squares in Cambridge MA. TERC has a great work environment with a casual dress code. Your contributions will make a difference!

The Role:

Candidate should be a creative problem-solver, have excellent communication skills, and work well in a team. We are seeking a full-stack web application developer with experience prototyping, developing, and maintaining web applications across multiple platforms. Development work includes both leveraging of existing framework libraries as well as custom development of new functionality. While the emphasis for this role will be on backend work, engineers will need familiarity with prototyping and testing new development work at all levels of the stack, from front-end to back-end, concerns at the application-level to server-level management and scaling questions.

The successful candidate will balance new development work with ongoing support and maintenance of existing web applications that have already been developed. The successful candidate will co-lead planning and scheduling agile development or similar practices.

They will work on two large projects. The first expanding development of a platform built on Ruby on Rails, the second, a prototype, currently on a Drupal /PHP platform. Candidates are expected to have significant experience in at least one of these as well as general experience across multiple platforms.

Expertise:

Candidates will be expected to have strong familiarity with the following tools and processes:

- full-stack web application development across multiple frameworks, with experience in at least one of Ruby on Rails or Drupal (PHP); this should include development of custom libraries (not just re-use of existing libraries)
- general technical management including use of project planning, documentation and bug-tracking tools
- integration with rapidly evolving 3rd party APIs, e.g. (Facebook, Twitter, Google Analytics, Vimeo)
- frontend development experience with HTML, CSS and JS (jQuery)
- UI/UX design experience is a plus
- automated testing tools and processes
- experience with git-based tools for managing development and deployment workflows
- deploying on Amazon Web Services(EC2, etc.)
- general Linux server administration focused on the cloud, including
  - managing common services (Apache, MySQL, Solr/Lucene, etc.)
  - automated server configuration management (especially CloudInit, VMware, Puppet)

BS or MA in computer science or related field with a minimum of 3+ years of experience.

Excellent analytical skills, communication skills with excellent written and spoken English.

Position is full time but will consider hiring two 50% developers (one for each project).

Must be able to commute to workplace in Cambridge MA.

Please submit a resume and cover letter by email to Kimberly_Descoteaux@terc.edu  Competitive salary commensurate with experience. Excellent benefits. Please do not call.

#19-08 - Education Researcher

TERC, a non-profit dedicated to improving STEM education, is seeking either one full time or two part time educational researchers to join a dynamic team working on two projects both involving online communities of practice to facilitate knowledge exchange and collegial discourse. The first project is aimed at serving the needs of STEM teacher leaders and aspiring teacher leaders. (See: https://stemtlnet.org) The second project enables leaders of federally funded grants aimed at improving STEM teaching and learning to share their work with each other and multiple other constituencies through video and facilitated discourse (See: https://stemforal2019.videohall.com)

The successful candidate will work on-site with a team of seven that includes programmers, content management and outreach specialists, researchers, and Principal Investigators. We are located in a historic factory building between Porter & Davis Squares in Cambridge MA. TERC has a great work environment with a casual dress code. Your contributions will make a difference to the field of STEM teaching and learning.

Qualifications:

The successful candidate will have a Master's degree or PhD in educational research, communications research, psychology, or related fields. They will have an interest in one or more of the following:
Candidates who will be considered will have many of the following skills:

- Experience with both quantitative and qualitative analysis of data.
- Experience in designing surveys, interview protocols, and conducting focus groups.
- Creating and testing coding rubrics and applying them to different types of data including interviews, survey responses, and online discourse.
- Comfort with technology tools for data collection and analysis (e.g., Excel, NVivo, SPSS, survey administration tools).
- Experience/Interest in Social Network Analysis research.
- Strong communication and reporting skills, including the ability to work well with a team, draw conclusions from evidence, and present alternative perspectives and explanations.
- Strong written and verbal communication skills to prepare and present findings of the projects at conferences and to write articles for publication.

Please submit a resume and cover letter and sample of your research or writing by email to: Kimberly_Descoteaux@terc.edu

Please put “application for research associate position” in the subject line.

Indicate if you are interested in a full-time position, or a 50% position.

Competitive salary commensurate with experience. Excellent benefits. Please do not call.

#19-10 - Staff Researcher

The Center for School Reform at TERC invites applications for a part-time position. The Researcher will work on a research project that involves middle and high school students in addressing climate change through problem-based projects that innovate methods to reduce greenhouse gases. The project is funded by the National Science Foundation. The position is envisioned for a novice researcher who is interested in developing qualitative research skills.

The Researcher’s responsibilities will include, but are not limited to: assisting team leaders with the development of research instruments (surveys, interview protocols); organizing qualitative and quantitative data; conducting literature searches, drafting memos and parts of literature reviews; and assisting with qualitative data coding, and analysis.

Requirements:

- B.A. or B.S. in education or related social science field preferred;
- familiarity with qualitative methods;
- curiosity and willingness to learn on-the-job;
- abilities to work independently and on own initiative;
- abilities to demonstrate strong writing and analytic skills;
- excellent interpersonal skills and abilities to work with members of diverse groups;
- abilities to be well organized and to have excellent time management skills;
- good oral and written communication skills;
- familiarity with qualitative coding software (e.g., NVivo) is helpful but not required;
- knowledge of educational uses of social media
- knowledge of gender, race/ethnicity, social justice, and STEM issues is a plus.

The work will be for 8 hours per week and will begin September 16, 2019. Applicants must be eligible to work in the United States without sponsorship. Compensation commensurate with experience will be provided.

Please submit a resume and cover letter and sample of your research or writing by email to: gilly_puttick@terc.edu. Please do not call.

About TERC:

TERC is a not-for-profit R&D organization in Cambridge, MA is committed to improving STEM learning and teaching. Founded in 1965, TERC is internationally recognized for creating innovative curricula, fostering teacher professional development, pioneering creative uses of technology in education, supporting schools and school districts in the integration of technology into classroom practice and developing equitable opportunities for underserved learners. Publication of TERC’s materials and dissemination of our R&D findings is a top priority. For more information visit TERC’s web site at: ww w.terc.edu TERC has a passion for social justice and strives to create level playing fields for all learners, reaching more than three million students every year. TERC envisions a work community that brings together diverse, multicultural talent to transform futures through math and science education research.

TERC’s Commitment to Diversity

TERC deeply believes that a diversity of experiences, ideas, and characteristics (race, ethnicity, national origin, gender identity, sexual orientation, socioeconomic status, religion, disability, veteran status, and more) contributes to the creativity and impact of our research. We promote inclusion of such richly diverse perspectives not only to achieve equity in the workplace, but also to cultivate equitable and accessible learning environments in the diverse communities which we serve. TERC is actively seeking to diversify its staff and places a high priority on developing a staff that reflects the diverse communities we serve. We encourage people from all backgrounds to apply. See our EEO Policy Statement for more information.