Open Innovation Program Engineering Lead

TTS is hiring for the role of a GS-14 engineer for the Open Innovation Program (Challenge.gov and CitizenScience.gov). Engineers are crucial to the improvement and stability of our platforms. This is an opportunity to make a huge difference in the way the federal government engages with the public to support participation in innovation and discovery. This page contains a high-level summary of the role we have available.

Opportunity overview

This opportunity is with the General Services Administration (GSA), Federal Acquisition Service (FAS), Technology Transformation Services (TTS), particularly with the Open Innovation Program in the Open Data and Participatory Sciences Branch. TTS applies modern methodologies and technologies to improve the lives of the public and public servants. We help agencies make their services more accessible, efficient, and effective with modern applications, platforms, processes, personnel, and software solutions.

The Open Innovation Program includes Challenge.gov and CitizenScience.gov. Challenge.gov is where competition delivers innovation for the public good. Similarly, CitizenScience.gov nurtures connections between the federal government and the public to advance scientific discovery and research. With these sites we are transforming how the federal government engages with the American public.

CitizenScience.gov hosts a catalog of over 500 federally sponsored citizen science projects along with a toolkit to assist in the design of projects. The federal government is the primary audience for this static informational website. It serves to promote knowledge sharing and capacity building among federal researchers who seek to engage the public in scientific research. CitizenScience.gov uses Jekyll and HTML and is deployed on Cloud.gov Pages. Visit the Github repository here.

Challenge.gov serves 2 primary purposes: 1) as a platform where agencies can host competitions to engage public solvers, and 2) to build prize competition capacity among federal agencies. The website hosts active challenges and resources for federal employees including a toolkit, user guide, case studies, and blogs. Since launching in 2010, Challenge.gov has hosted almost 2,000 challenges which are maintained in our challenge archive. The static website uses Jekyll and HTML and is deployed on Cloud.gov Pages. The Github repository is here. The Challenge.gov platform provides an intuitive challenge creation and management experience for federal employees. It is a Phoenix application written with Elixir and hosted on Cloud.Gov. The code repository is managed and maintained publicly on GitHub at https://github.com/gsa/challenge_gov.

Role summary

The Open Innovation Program is looking for a talented software developer who will build and maintain the infrastructure necessary to help us and our partner agencies engage the public in citizen science activities and prize competitions. As an engineer in the Open Innovation Program, you have an opportunity to impact how the federal government engages with the public. Our work supports inclusion and reduces bias in participation. Both Challenge.gov and CitizenScience.gov practice open source development; your published work here will be in the public domain.

This role may be perfect for you if you have the:

- Technical skills to build new features and tackle engineering problems
- Ability to understand and program solutions that meet diverse user needs
- Desire to work collaboratively with a matrixed and dynamic team
- Judgment to prioritize work effectively and with purpose

Our ideal candidate is excited about, and understands the complexity involved with, leading development and modernization of two websites that are centered on promoting public participation. Ideal candidates should have at least 3 years experience with front end development and understand GitHub workflow for development. Additionally, experience with REACT, JavaScript and Ruby are ideal and experience with Elixir is a helpful bonus.

Key objectives

Key objective 1: You'll contribute high-quality, well-tested code across Challenge.gov and CitizenScience.gov using best practices for modern software development.

- Develop new capabilities and maintain current CitizenScience.gov and Challenge.gov systems
- Influence roadmap planning and design using usability and accessibility research, analytics, technical feasibility, and other metrics
- Practice human-centered design, accessibility, user testing, feature prioritization, DevSecOps, test-driven development, and other relevant concepts
- Participate in code review, architecture discussions, and feature prioritization, with a focus on maintainable, long-term solutions
- Guide and support work within a distributed, blended contractor and federal employee agile team
- Integrate security requirements throughout the code development lifecycle
- Support documentation and testing to meet FISMA standards and authority to operate

Key objective 2: You'll lead modernization of Challenge.gov and CitizenScience.gov..

- Participate in constructive discussions, openly sharing knowledge, and demonstrating value for all contributions
- Direct contractor engineers' work iteratively and effectively, providing expertise and support for planning, estimations, and prioritization
- Demonstrate a user-centered and data-driven approach that guides modernization efforts
- Emphasize delivering an accessible and inclusive digital experience that engages and motivates the public to participate

Key objective 3: You'll meet customer expectations and produce high-quality results by applying development knowledge, analyzing problems, and calculating risk.

- Deliver measurable, high-quality, timely, and cost-effective results
- Demonstrate your credibility in your area of expertise, deliver high-quality work, and accept responsibility for mistakes
- Meet the needs of a diverse platform user-base in a professional manner

- Identify and analyze a broad range of problems in a constructive way