National Institute of Standards and Technology
U.S. Department of Commerce

engineering laboratory

Front-End/Mobile Developer

The NIST Engineering Laboratory is looking for a front-end/mobile developer to round out our Dev/Ops/Data Management team.

You would start by translating functional requirements into interesting and supportable web-based applications that showcase our work to the public. Build user-friendly, engaging, mobile-friendly web interfaces to manage the scientific data workflow and support data storytelling. You are of course dedicated to principles of good software development and user experiences.

Some of the projects include mobile data collection apps for our disaster studies researchers and developing mobile-friendly websites to enable the public to access and work with open data from projects in the NIST Engineering Laboratory.

We do not have one large codebase; instead we have multiple smaller research projects that have different applicability to both academics and the general public. This position is for someone who likes a diverse set of projects and enjoys the challenge of figuring out new ways to present data to the public.

Job Responsibilities

- Working with multiple independent research teams, developers, and IT operations people to design and build open access front ends for our data.
- Contributing to design discussions for both front-end interaction and architecture of systems.
- Developing mobile and responsive web applications to showcase our data.
- Collaborating on product and feature planning.
- Working closely with researchers and data specialists to help clarify their requirements.
- Helping researchers understand and make their data of interest to the public.
- Working in an agile environment.
- Working with team using DevOps principles for code deployment and production systems management.
- Troubleshooting application issues in production and resolving development issues.

Technical Skills

We prefer open source solutions so we're looking for someone comfortable with open source tools and techniques, who is tool-agnostic and willing and able to choose and use the right tool for the job.
Currently, most of our development is Python-based (e.g. Django, Flask, SciPy, Bokeh) with use of various JavaScript libraries (jQuery, lodash /underscore.js, D3.js, leaflet.js, gulp.js, Browserify, backbone.js, React) and back-end support with tools such as Node.js, Postgres, MySQL, MongoDB, etc.

Recommended Skills

- A history of implementing successful web applications and APIs.
- Well-versed in the language, techniques, and tools of UI/UX design.
- Comfortable with Agile development techniques.
- Familiarity with Docker or similar containerization schemes.
- Proficiency with modern development tools and techniques (mainly open source)
- Experience working with git and Github for source control management.
- Ability to judge code quality and contribute towards best practices.
- Understanding of backend data systems and how they work with front-end applications.
- Experience in a research environment or in an environment where the data may not be "big" but it could be complex and/or unstructured.
- Love of learning and open to new software languages and tools, willingness to experiment and learn new visualization approaches.
- Practical knowledge of software systems security best practices.
- Able to juggle multiple projects simultaneously.
- Experience with application design, development and testing.
- Analytical mindset and problem solving skills.
- Good team player, yet self-motivated, with excellent writing and communication skills.

Please include your GitHub username on your resume.

Requirements

US Citizenship required
BS in a science, engineering or math-related field required

About Us

From the smart electric power grid and electronic health records to atomic clocks, advanced nanomaterials, and computer chips, innumerable products and services rely in some way on technology, measurement, and standards provided by the National Institute of Standards and Technology.

Founded in 1901, NIST is a non-regulatory federal agency within the U.S. Department of Commerce. NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. NIST consists of several research laboratories, one of these is the Engineering Laboratory.

The Engineering Laboratory promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology for engineered systems in ways that enhance economic security and improve quality of life.

As well as a competitive salary and benefits package, we also offer continuous learning prospects, including technical training, developing leadership skills, and attendance at industry events.

For further information, please visit www.nist.gov/el or contact carolyn.rowland@nist.gov.
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