



"I like getting to work directly with end users, to see how the work I'm doing matters."

Bio

Eli excelled at his computer science bachelor's training and prides himself on coding creatively. He is proud to help create software that advances medical discovery, and prefers such work over a corporate position. Working to benefit society is important to him.

Eli's main tasks are designing, coding, testing, and debugging software. He works on 2 - 4 projects at a time, allocating his time from grant and project funding. He's helping to create an accessible and intuitive user interface for therapeutics researchers. He's also building tools to improve infrastructure for patient sample tracking in next-generation sequencing analysis workflows. He manages one legacy system and hopes, time allowing, to rewrite the existing application. Talking to end users to comprehend their use of the tool has inspired him with potential solutions.

Eli tries to spend most of his day writing code. His small team employs agile development, which fosters collaboration and allows for changes to the project. Eli also answers user questions over email or Slack and researches solutions to technical issues on Stack Overflow.

Education: BS, Computer Science

Years of experience: 5

Work location: Have laptop, will travel

Goals

- To develop software that is maintainable and flexible enough to meet users' rapidly changing needs
- To develop tools that will impact scientific discovery
- To explore possibilities for open source tools that can be leveraged across institutions
- To mentor more junior developers and one day lead a team



Software attitude & use

- Eli enjoys stretching his mind as he teaches himself new technologies
- Polyglot programming languages: Ruby, mainly using Rails framework, Python, Java, JavaScript for the front-end (Angular and React)
- Other: DataGrip, RubyMine, Jenkins (Continuous Integration), Postgres (Database)
- Research and collaboration: Trello, GitHub, Slack, video conferencing software
- General: Microsoft Office Suite but would prefer Google Suite. Uses Outlook web client for email



Scholarly Outputs

- Credit on publications or on posters when researchers use/cite databases he's developed
- Conference presentations on open source tools he's developed
- Sharing open source code on GitHub

Pain Points

- Loses focus when switching contexts
- Handles many tasks solo
- Lack of funds for user support help

Motivators

To learn the history of projects from team members and end users in order to understand past decisions and to design intuitive solutions moving forward

A team culture of learning, writing good code, and collaboration

Contributing to open source projects

Wants/Needs

- Funding for his team to hire more developers, a UX person, someone in product and project management. Eli would like more colleagues with whom he can share knowledge and troubleshoot
- Large blocks of time to focus on writing good code
- Time with researchers so he can understand their goals, their world, and learn more about their projects
- Time and support to optimize his work and address anything that can be made more efficient

Professional Development

Uses Stack Overflow to share problems and solutions, and to collaborate with developers across the world

Attends lunch-and-learns on technical topics. Attends tech meet-ups hosted by start-ups to learn about new technologies

Has attended informatics conferences with developers from other institutions in similar roles

Does side projects outside work on different languages for fun