



Jacob Trock

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Passionate, genial programmer and entrepreneur.

Work Experience

Broad Institute of MIT and Harvard, Cambridge MA

Software Engineer for the [open source](#) scalable biomedical platform [Terra](#) 01/2023-Present

- Lead efforts on team and working group to convert components to typescript
- Proposed and led efforts to implement prettier/eslint on large open-source codebase
- Implemented and tested new modal to delete Azure Disks in React with Typescript as part of collaborative effort to add support for persistent disks
- Worked collaboratively to regress and repair breaking changes in the hour after they were discovered

Phast Diagnostics, Boston MA

DevOps/Hardware Engineer for [antibiotics-resistance AI platform](#) 01/2022-06/2022

- Worked alongside senior engineer to develop secure patient data and encryption handling backend in Java
- Worked on client/hospital facing GUI, Worked on C# algorithm to compensate for chip curve, implemented comprehensive unit testing
- Wrote Bash scripts to manage uploading data from hard drives to cloud platform
- Worked in Python to adapt Jupyter notebooks to production Docker containers and write scripts to parse >1gb excel sheets from hospitals into DB query format
- Managed AWS edge Lambda, RDS(Postgres) and EC2 resources across many regions(US, Europe, Korea)
- Proposed abd Reduced costs by up to 60% by porting existing Lambdas to more affordable ARM instruction sets and by using cheaper SPOT instances
- Worked on prototype hardware and software for cloud-enabled microscope for AI diagnosis ecosystem
- Made visual assets for GUIs and presentations using the Adobe Suite

Education

- BS Computer Sciences, Graduation 2025, Khoury College, Northeastern University
- BS Business, Graduation 2025, D'Amore McKim School of Business, Northeastern University

Personal Endeavours

- Nebulous Systems: Cloud-portable SaaS, Built out billing systems, backend(2022)
- ServiceEngine: NoCode File processor, Invited to TechCrunch Disrupt, youngest finalist at Husky Startup challenge(2021)
- Furniture Design (metal welding and woodwork), Technology recovery and refurbishment, 3D printer repair, Linux/Nixos, Secure computing, low-level/embedded systems, camping, kayaking, biking, skateboard photography