ebaum@mitre.org linkedin.com/in/elibaum (203) 985 5069 Washington DC

Professional Experience

Jun 2021 - Present

MITRE, McLean VA

Electrical Engineer, Naval Division

- Task lead for 5G physical- and protocol-layer research effort
- Conducted in-depth security analyses of sensitive U.S. Governemnt hardware systems
- Built prototypes for passive radio-frequency (RF) sensing networks
- Collaborated on the development of tactical network routing and characterization tools, and contributed MITRE's work back to the open-source community.
- Developed optical satellite-tracking application for a US military academy
- Maintained Top Secret clearance

Jun 2019 - May 2021

U.S. Department of State, Washington DC

Information Management Technical Specialist

- Tested communications systems for U.S. diplomatic facilities abroad
- Developed Python and web applications for data analysis, hardware testing, and radiofrequency characterization
- Served as government technical representative on research, development, and acquisition contracts
- Maintained Top Secret clearance

Jun 2018 - Aug 2018

IBM Systems, Burlington VT

Summer Development Engineering Intern, Burn-In & Test

- Created networked Python applications for automated stress-testing of IBM POWER and Z processors
- · Designed automated diagnostics system for semiconductor test equipment

Jun 2017 - Aug 2017

InterSystems Corporation, Cambridge MA

Summer Intern, Quality Development

- Built full-stack automated web application for analyzing and visualizing product test coverage
- Mastered proprietary database language
- Developed APIs for integration with open-source software

Education

Sep 2015 - Jun 2019

Yale University, New Haven CT

B.S. cum laude in Electrical Engineering & Computer Science

Senior Project: Dynamic Binary Translation for Optimized Functional Units (advisor: Rajit Manohar) **Activities**

- Teaching Assistant, Systems Programming & Computer Organization
- Design Lab Assistant, Yale Center for Engineering, Innovation, and Design
- Principal Trumpet, Yale Concert Band & Davenport Pops Orchestra

Skills & Interests

Languages: C, Python; Go, Java, Ruby on Rails, Web development, Assembly

Areas of expertise: Cellular networks and software-defined radio; embedded systems, digital electronics, and semiconductor systems; Linux; cybersecurity and reverse engineering; artificial intelligence

Activities: Code for DC Volunteer, working on a Rails/Mongo app to help expand access to medical care among vulnerable populations; ultimate frisbee

Personal: Avid consumer of local news, investigative podcasts, and remixes of songs that shouldn't be remixed; devotee of public transit and modern design; amateur linguist, urban planner, chef, runner, and mad scientist.