Eli Baum

ebaum@mitre.org | elimbaum@gmail.com
https://elibaum.com

203 985 5069
Washington DC

Professional Experience

Jun 2021 – Present	**MITRE, McLean VA** Senior Electrical Engineer, *Naval Division*

- Conducted in-depth security analyses of sensitive U.S. Government hardware systems
- Led 5G cellular radio research effort
- Prototyped passive radio-frequency sensing networks
- Collaborated on the development of tactical network routing systems and contributed work to the open-source community
- Developed optical satellite-tracking application for a US military academy
- Received Trailblazer Award for exceptional security research and rapid prototyping
- Maintained Top Secret/SCI clearance

Jun 2019 – May 2021	**U.S. Department of State, Washington DC** Information Management Technical Specialist

- Developed, tested, and trained colleagues on communications systems for U.S. diplomatic facilities abroad
- Created applications for data analysis, hardware testing, and radio-frequency 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 platform for automated stress-testing of IBM POWER and Z processors
- Designed diagnostics system for semiconductor test equipment

Jun 2017 – Aug 2017	**InterSystems Corporation, Cambridge MA** Summer Intern, *Quality Development*

- Built full-stack web application for analyzing and visualizing product test coverage
- Mastered proprietary database language and 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: Python, C; Ruby on Rails, HTML/CSS/JavaScript, Java, Go, Assembly

Areas of expertise: Cellular networks and software-defined radio; reverse engineering, side channel analysis, and security; Linux; embedded systems, digital electronics, and semiconductors

Activities: Code for DC volunteer, working on a Rails/Postgres app to help expand abortion access to 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.