

# Eli Baum

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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 to Prof. Stan Eisenstat, *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.