
LinkedIn

Barak Binyamin

US Citizen, TS clearance expired 2022
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Github

OBJECTIVE

Passionate about building tools that are fun and simple to use. I have experience building full stack applications, working with embedded devices, & FPGA's. I'm seeking a full time position starting in June of 2024

EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, NY
Bachelor of Science in Computer Engineering, Minor in Mathematics, expected May 2024
Core Courses:

Digital System Design I, II	Computer Organization	Computer Architecture
Interface & Digital Electronics (CE)	Computer Science I, II	Software Eng. I
Assembly and Embedded Prog.	Applied Programming in C	Digital Electronics (EE)
Digital Signal Processing	Circuits I & II	Machine Intelligence
Data Communications	Hardware Security I	Graph Theory
Memory Centric Computing	Combinatorics	Codes & Ciphers

SKILLS

Programming Languages: Bash, Batch, Javascript, Python, Java, C & C ++, asm, Matlab, Swift, VBA, VHDL
Dev Environments: Linux, MacOS, Windows
Software: Vue, React, Nodejs, AWS, Docker, Helm, Harbor & Rancher, Git, Ghidra, Jira & Agile Development Life Cycle, Altera Quartus, ModelSim, Xilinx Vivado, EasyEDA, AutoDesk Inventor, Fusion 360, Microsoft Office
Hardware: Oscilloscope, Digital Multimeter, Waveform Generator, Digital Signal Analyzer, Soldering Iron

EXPERIENCE

Sidus Space, Cape Canaveral, FL **Jun 2023 - Feb 2024**
Software Engineering Intern - Automated the creation of development environments using Bash, contributed to hardware-software to send pictures down to earth from LizzieSat utilizing an FPGA, created tools to visualize up status of crucial services using Docker & Nodejs

Innov. Ecosystem & Emerging Tech, Unisys Bluebell, PA (Remote) **Jun 2022 - Dec 2022**
Ecosystem and Emerging Tech. Intern - Developed scripts in python & javascript to scrape and ingest unstructured & semi-structured company data. Utilized Helm, Rancher, Docker, Nodejs & BrightIdea to build and deploy a service to the cloud that the team used to track business relationships. Researched regulatory technology, & aided team members by programmatically automating tasks

Cyber Division, Systems Tech. & Research Woburn, MA **May 2021 - Dec 2021**
Cyber Intern/Co-op - Developed radar signal analysis tools including an up-down converter, a LabVIEW radio control UI, and python scripts to analyze and graph data using Matplotlib. Wired custom JTAG harness, and used openocd for my research into Arm Coresight & JTAG exploits. Utilized Nodejs, & Vue to build & deploy a prototype full stack information system for managing company equipment, documentation, and hardware resources

Computer Engineering, RIT Rochester, NY **Aug 2020 - Nov 2020**
Teaching Assistant / Mentor for 100 students - Assisted students with questions related to arduino & computer science. Provided weekly help sessions for freshman navigating computer engineering

DM Properties, Rochester, NY **Jan 2020 - May 2021**
Residential Property Manager and Advertiser - Created advertising solutions including a website & flyers, coordinated with tenants, ensured maintenance of the property

PROJECTS

Automatic BP Cuff - Working on a team to innovate on the approach to blood pressure measurement
Speakers - Developing a Bluetooth splitter to enable wireless connection to multiple brands of speakers, hardware schematics, firmware, mobile app source and documentation shared publicly at github.com
KioT-dl - Developing a cross platform desktop application for scraping fully formatted music from Google, Genius.com, & Youtube. Documentation & source shared publicly at github.com
Mic - Developed a containerized voice controllable internet radio station using Docker, Nodejs, Vue, & Meilisearch. Documentation & source shared publicly at github.com
Population-Count - Developed a hardware solution to a Population-Count algorithm, written in VHDL. Testbench and documentation shared publicly at github.com