Nathaniel Navarro

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SUMMARY

Self-sufficient, disciplined, fast-learning developer with a demonstrated ability to quickly delve into large codebases and execute on both client-facing and internal features. Full cycle development experience with Java backends, testbench and execution pipelines, and Linux development environments, with strong organizational, communication, and collaborative skills honed through military experience.

EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Expected May 2024

Bachelor of Science, Computer Science

Minor in Electrical and Computer Engineering

GPA: 4.13; Dean's List

Relevant Courses: Functional Programming; Discrete Structures; Data Structures and OOP; Digital Logic; Algorithms; Data Science; Natural Language Processing; Systems Programming; Computer Architecture; Microcontrollers

EXPERIENCE

Netflix, Los Gatos, CA, Software Engineer Intern

May 2023 - Aug 2023

- Engineered concise, elegant, web-orchestration-infrastructure for the deployment of new webpages leading to 500k monthly increase in users-with-phone-numbers.
- Spearheaded a cross functional effort to spec and implement integration of encryption services to secure sensitive user data, mitigating risk of accidental leaks for 230 million users.
- Engineered infrastructure, collection, and monitoring of A/B tests to quantify effects of feature deployments.

Capra Research Group, Cornell University, Research Assistant

May 2022 – Present

- Delivered a corrected AXI protocol implementation, a revamped Linux to FPGA execution pipeline, and planned and developed a from-scratch Cocotb testbench allowing for CI testing of AXI protocol.
- Collaborated with external researchers to isolate 14 protocol bugs in previous AXI implementation through waveform analysis and source-code inspection.
- Integrated corrected FPGA execution system with existing toolchain-driver to allow for easy execution of programs on physical hardware.

Autonomous Underwater Vehicle, Cornell University, Software Developer

Sep 2021 – Present

- Fully integrated and debugged software, hardware, and mechanical components of our autonomous vehicle under 3 month deadline to facilitate success at Robosub 2022.
- Achieved a podium finish at Robosub 2022, placing 6th out of 39 teams.
- Implemented CV algorithms such as Hough transformations, SIFT detection, and Hu moments using OpenCV.

Israel Defense Forces, Israel, Senior Drill Instructor; Staff Sergeant

Dec 2018 - Aug 2021

- Commanded platoons of 40 recruits and instructed them in the skills of a combat Air Defense Operator.
- Trained and supervised junior Drill Instructors in the correct handling and instruction of recruit squads.
- Collaborated with individuals ranging from private to Lt. Colonel to ensure an organized, efficient, complete training experience at the IDF's Air Defense School for 400 soldiers quarterly.
- Received Award of Excellence (2020) for outstanding performance in the IDF Interceptor Training Course.

SKILLS

Technical: Python, Java, Spring Boot, OCaml, C, C++, Rust, FPGAs, Linux, Git, Docker, OpenCV, Verilog, PyTorch **Languages**: English (fluent), Hebrew (fluent), Arabic (intermediate)