Optimized CV

Efrat Zusman
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Summary

Highly motivated Junior Verification Engineer with a BSc in Computer Engineering (Avg. 87) seeking to apply strong foundational knowledge in digital design, hardware description languages, and object-oriented programming to complex ASIC verification challenges. Eager to contribute to block and top-level verification, test automation, and robust IP quality in a dynamic, global semiconductor environment.

Education

BSc in Computer Engineering | Ben Gurion University of the Negev | 2020 – 2024

- Graduation Average: 87

Technical Skills

- HDLs & Verification: Verilog, SystemVerilog
- Programming Languages: Python, C, C++, Java
- Tools & Platforms: Git, GitHub, Jira, Jenkins, Linux, Raspberry Pi, Pycharm, VS Code, Vivado, ModelSim
- Concepts: Digital Design, Computer Architecture, Embedded Systems, RTOS, OOP, Data Structures, Algorithms, IoT, Networks

Work Experience

Software Engineer | Intel, Wireless Group | 2022 – Present

- Developed comprehensive Python-based automation frameworks and tests for WiFi, Bluetooth, and 5G communication products, significantly enhancing verification efficiency and product quality.
- Implemented advanced debugging features within test automation scripts, streamlining issue identification and resolution for complex embedded systems.
- Contributed to embedded development using C on RTOS platforms, gaining hands-on experience with hardware-software interaction in a critical environment.
- Collaborated effectively within an Agile development lifecycle, consistently delivering high-quality solutions.

Projects

Digital Design of a RISC-V CPU (Verilog/SystemVerilog) | Final Project

- Designed and implemented a 5-stage pipelined RISC-V CPU, including instruction/data caches and interrupt handling, using Verilog.
- Developed a sophisticated SystemVerilog testbench for extensive functional verification, ensuring architectural compliance and robust performance.
- Simulated and debugged complex memory hierarchy systems, applying core digital design and verification methodologies.

Home Automation System (Python/Raspberry Pi) | IoT Project

- Engineered a full-stack home automation system, leveraging Python scripts on Raspberry Pi for device control, scheduling, and sensor integration (temperature, light, motion).
- Utilized MQTT for efficient, scalable inter-device communication, demonstrating practical IoT implementation and software architecture skills.

Military Service

Electronic Technician, Test & Repair Department | Israeli Air Force | 2017 – 2019

• Expertly troubleshot and repaired complex electronic systems, including avionics, radars, and communication equipment, maintaining 100% operational readiness.

• Operated and calibrated advanced testing equipment, ensuring precision in diagnostics and repairs.

• Mentored and trained new technicians, fostering a high-performance team environment.