

Hardware Engineer, EE B.Sc. from Afeka College of Engineering

## Education

### Electrical and Electronics Engineering Student at Afeka College of Engineering

- **Specializations:** Computer Engineering, Communications
- **Final Project** – Protection against fault injection attacks on AES encryption (Final grade – **96**)
- Scholarship for 2 years of tuition based on Psychometric Test grade (707)

### Design and Verification Courses at Udemy

- UVM for Verification Course at Udemy ([Certificate](#)): Used UVM for generalizing testbench structures in SystemVerilog (Used Macros, factory, UVM\_OBJECT/COMPONENT, UVM\_PHASE, TLM communication, UVM\_SEQUENCE, config\_db)
- SystemVerilog for Verification Course at Udemy ([Certificate](#)): Creation of SystemVerilog testbenches using OOP, implemented classes: Generator, Driver, Monitor, Scoreboard, Transaction, Interface, used randomized constraints
- Verilog for an FPGA Engineer Course at Udemy ([Certificate](#)): Fundamentals of Synthesizable Verilog code and testbenches, all parts of the Xilinx Vivado Design Suite flow for FPGA Design

## Job Experience

2023

### V&V Engineer at Kramer Electronics

- Verification and Validation of R&D products, including Hardware and Software tests
- Deep understanding of HDMI, DisplayPort and USB protocols
- Creating, building and maintaining test automation setups for manufacturing contractors
- Automating of work processes for manufacturing contractors using **Python** and **Powershell**

2012 – 2015 (Military service)

### Cyber Security Analyst at Unit 8200, IDF

Collected open-source intelligence related to cyber security, and created intelligence reports in Hebrew and English

## Projects

- **MIPS multi-cycle** processor using VHDL – [GitHub repo](#)
- Various testbenches for multiple designs, including: **FIFO, APB/AHB/AXI/Wishbone Bus protocols, SPI, UART, I2C, Memories**
- **VHDL** Median filter for noisy images, implemented on an **FPGA**
- **C Program** for **I2C** communication between microcontrollers

## Skills

- Software tools: **ModelSim, Quartus, Tcl, OrCAD PSPICE, MATLAB, Simulink, Linux, Ansible**
- Lab Experience: DMM, Oscilloscope, Vector Analyzer, Network Analyzer
- Excellent technical skills and experience with delicate physical work (soldering, wiring, etc.)

## Languages

- Hebrew – Native proficiency
- English – Fluent speaking skills, experience wording professional documents