



# Gil Yaakov

## Computer Engineering Graduate

A dedicated, hardworking team player, highly motivated, creative, and reliable with excellent interpersonal relationship skills.



[gilyaakov3@gmail.com](mailto:gilyaakov3@gmail.com)



0547236694



Modiin, Israel



[linkedin.com/in/gil-ya-akov-0785781a5](https://www.linkedin.com/in/gil-ya-akov-0785781a5)



[github.com/gilyaakov](https://github.com/gilyaakov)

## SKILLS

C C++ Python

Bash

GNU extensions for GCC

Device Drivers

Linux Kernel

System Verilog

Quartus Prime

ModelSim

DE10-Lite FPGA

Zynq UltraScale+

## LANGUAGES

Hebrew

*Native*

English

*Full Professional Proficiency*

## EDUCATION

### B.Sc Computer Engineering, GPA 85

#### Bar - Ilan University

10/2018 - 10/2022

##### Selected Courses

- Logic Design
- Operating Systems
- Microprocessors and Assembler language
- Introduction to Software Engineering
- Digital Electronic Circuits
- Computer Networks
- Computer architecture
- Digital Integrated Circuits

### Computer Science and Physics, GPA 104

#### Galili High School Kfar Saba

09/2008 - 07/2011

## WORK EXPERIENCE

### Linux Kernel Developer (Student Position)

#### Elbit Systems Ltd

08/2021 - Present

##### Tasks

- Writing a driver for AXI DMA device responsible for packet traffic between the data link and an encoder.
- Writing a driver for TTY device whose purpose is to transferring software updates to the platform from kernel space to user space.
- Working closely with the hardware team in order to build functionality and performance tests for the hardware.
- Creating an automation tool for the process of creating the BOOT file mainly using bash.

## PROJECTS

### Design 5-Stage RISC-V Core & Hardware API

- As part of the graduation project I designed 5-Stage RISC-V Core which supports RV32I ISA.
- The memory space is divided into 16kb of instruction memory, 16kb of data memory containing the stack memory and the control registers memory for communication with the FPGA. In addition, VGA memory of size 37.5kb for communication with the screen.
- An environment was built for testing and simulation by using automation.
- The architecture was synthesized on a DE10-Lite FPGA.
- The last step involved writing an hardware API and a game that runs on the processor.

### A system for detecting an epileptic seizure and warning with a vibrating bracelet (Hackathon)

- As part of hackathon, we were required to find solutions to everyday problems of people with disabilities.
- My group developed a system for a child with epilepsy whose father was deaf. The system consists of a wireless bracelet which connects to the child's arm, during an epileptic seizure this bracelet transmits a signal to another bracelet which is connected to the parent's arm and vibrates.

## MILITARY SERVICE

### Combat Officer in the Combat Collection Corps (2011 - 2017)

*In my last position in the military service I served as Company Commander (Rank of Captain). As part of the job, I've been given the right to command on training company of about 120 soldiers.*