Yair's CV

yair.gadelov@gmail.com

+972 52 8489064

Experience

I Have more than 15 years of experience in the Israeli Hi-Tech. I began as an Algorithm Engineer and switched role to RT/Embedded Software engineer.

BELKIN Laser Ltd - Medical device company. Embedded System Software Engineer

2017-2019: AppCard Inc - Manages customers clubs, Senior Software Engineer

Fully responsible and project lead of USB, RS232, 485 and Network sniffers to grub receipts data of the point of sails and sending it to the backend for further analysis. The product is SW/HW integrated and includes FPGA, custom board, an application processor, USB components and more. The product was done from scratch and had installed in fields.

- Embedded Linux and BSP: IMX6, c/c++ programming under Linux Kernel/Userspace, Yocto build system, bash, python, GCC, gdb, makefiles, Autotools
- Xilinx FPGA & Board design: Verilog programming, I2C, SPI, UART, Board bring up and testing, Lab equipment
- System architecture, IoT, Rest API, client programming
- Working with different functionalities: QA & Product, DevOps, Backend team

January 2016 - December 2016 Senior: Nano Dimension - Builds and produces 3d printers, Embedded SW Engineer

I was in both teams: SW: C++programming for printer management application team, HW: Building from scratch a printer head controller using Xilinx Zynq7000. The job involved the following tasks:

- Linux embedded BSP, Linux kernel drivers,
- FPGA coding with Verilog, C/C++ programming,
- Bare metal and FreeRTOS programming of ARM cortex-m7

Sep 2010 - December 2015: Coloright - designed and developed hair coloring systems

I began as an algorithm engineer and switched role to SW/FW/HW Embedded engineer

2011-2016: SW & HW Engineer

Part of a multidisciplinary team: HW, SW, Optics, and mechanics that developed a spectrometer from scratch. Responsible for embedded SW and firmware design.

- Embedded Linux and board bring up (IMX6,zynq7000)
- Cross Compilers, GCC, auto-tools, makefiles
- Linux device drivers
- Camera sensors
- FPGA Coding using Verilog, soft micro-controller nios2 integration
- C/C++/Python/Verilog
- Interfaces , protocols and components: WiFi,SPI,I2C,SDRAM , FTDI,FLASH RAM, DMA, TCP/UDP/IP
- Small micro-controllers: arm cortex-m3,stm8,msp430 and integration with FPGA

2010-2011: Algorithm Engineer

Member of the algorithm team. Responsible for developing statistical and prediction of coloring based on physical models.

- Numerical analysis | statistical algorithms | multidimensional optimization problems | Parameters estimations|regression
- Java | Matlab

June 2008 - August 2010: Galileo Satellite Navigation, Algorithm Engineer

Responsible for algorithm simulation and implementation using MATLAB C/C++/JAVA on X86, DSP, and FPGA. * Kalman Filters | Wavelets |Weighted Robust LMS | fixed point | FFT * Implementation and simulation of the GPS receiver and transmit CDMA channel. * HDL Implementation

June 2006 - July 2008, Algorithm Development

Member at the machine learning group. Responsible for solving clustering problems, data mining, feature exaction. supervised/unsupervised learning, GMM, PCA, K-means, statistics, and

Education

Ben-Gurion University of the Negev

- Bachelor of Science (BSc), Ben-Gurion University of the Negev · (1998 - 2002)
- Master of Science (MSc), Electrical engineering · (2002 - 2005)