Anton Zhivchikov

Hardware Engineer, FPGA Developer

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EXPERIENCE

PROTERA | Product Owner, Senior Hardware Engineer, FPGA Developer   Jan 2020-Present
- Clarified the customers needs
- Set up an electronics design team (GitLab, Centralised Altium Designer Database Library, Instructions)
- Developed the electronics for a modular Multi-port RF (up to 20 GHz) Switch SCPI (VISA) compatible
- Developed the electronics for a RF Signal Generator (up to 20 GHz)
- Developed the electronics for a 4-port RF Power Meter
- Developed and Debuged FPGA projects for Gowin Arora and LittleBee family chips
- Co-operation with PCB and PCBA manufacturers
- Creating Requirements for the Programming team

Digital Vision Lab | Senior Hardware Engineer, FPGA Developer   Dec 2018-Dec 2019
- Developed the digital part of electronics for a prototype of microwave (24 GHz) speed radar
- Developed and Debuged FPGA projects for AMD(Xilinx) Zynq7000 chips
- Configured the interaction of the Processor Subsystem (PS) of Zynq with the FPGA array (PL) using DMA
- Builded GNU/Linux components in Petalinux and Buildroot environments
- Developed applications for Zynq in C language.
- Developed scripts for PC in Python

NPP CRTS | Hardware Engineer, FPGA Developer   Feb 2015-Dec 2018
- Developed the electronics for FPGA-based SoMs (System on Module)
- Developed and Debuged FPGA projects for Intel(Altera) [Arria V SoC, Arria 10, Cyclone V SoC and MAX 10] and AMD(Xilinx) [Zynq7000 and Zynq US+] chips
- Developed Devices for ADS-B (Automatic dependent surveillance-broadcast) using proprietary SoMs
- Developed SDR transceiver Devices (with AD936x, AD9371)

SKILLS

Hardware
- High Frequency ADC and DAC, Clock Subsystem, Synthesizer, RF Switch, Power System
- FPGA, STM32, ESP32, MSP430, RISC-V, ARM
- PCIe, JESD204, DDRx, Ethernet, SATA, USB2.0, USB3.0, RS-422, CAN, SPI, I2C
- LVDS, MIPI-DSI, MIPI-CSI, DP, HDMI

Programming
- Verilog, SystemVerilog
- Basic - C/C++, MATLAB, Python

Tools/Others
- Altium Designer, KiCad, OrCad
- Intel Quartus, AMD Vivado, Gowin EDA, Questa/Modelsim
- Scripting(Bash, Python), git, GitLab, CI/CD, GNU/Linux
- LiteX, WaveDrom, vunit, TerosHDL, VS Code
- Tested and Debugging prototype with measurement equipment

EDUCATION

Saint Petersburg Electrotechnical University "LETI", Russia | Specialist degree   2003-2009
Audio-Visual Equipment

Kagle | Machine Learning Courses   Oct 2023
Intermediate Machine Learning

dlcourse.ai | Machine Learning Courses   2020
Deep Learning На пальцах

OTHERS

About Me
Running, Kayaking, Blood Donor