Dan Bogachek
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danbogachek.com

SKILLS & INTERESTS

Languages: Python, C, C++, JS/HTML/CSS , Verilog, Bash, Batch
Technologies: Unix, Windows, Git, RabbitMQ, gRPC, REST, MongoDB, Raspberry Pi, AVR, ARM, OpenCV, KiCAD (1000+ hours), Fusion 360
PCB Design
- 1, 2, and 4 layer
- RF design: ESP8266EX (Wifi) & nRF24L01+ (RF module) layout
- AVR 8 and 32 bit, ARM Cortex-M4

Hardware: PCB stenciling & assembly, perf-board prototyping, PCB rework
Interests: Embedded systems, robotics, machine learning, Internet of Things
Native Russian speaker, some broken Spanish

EXPERIENCE

Handwrite   May 2016 – present
Co-founder & CEO
- The easiest way to send authentic handwritten cards – www.handwrite.io
- Developed web interfaces, hardware & software systems for handwriting robotics and automated fulfillment

Becton Dickinson – Diagnostic Systems   June – August 2017
Electrical Engineering Intern
- Tested and reworked PCBs, cabling, electromechanical assemblies for several BD molecular diagnostic system platforms
- Developed imaging software for use with characterization and six sigma using OpenCV
- Implemented embedded discrete PID temperature control on 72 PWM channels using C on RTOS, characterized and tuned PID parameters

Stanley Black & Decker – Connected Systems   June – August 2016
Electrical Engineering Intern
- Prototyped and developed radio-based real time location system (RTLS) technologies
- Reworked PCBs used in product-service pilot, aided in tripling node battery life
- Created methodology to evaluate performance of RTLS technologies along with a cross-platform Python Tkinter GUI application – verumrtls.com

Startup Shell   August 2015 – May 2016
Director of Resources
- Redesigned and renovated co-working and incubator space
- Managed and acquired digital and physical resources for 50+ student-run ventures

University of Maryland Institute for Advanced Computer Studies   June - August 2014
Electrical Engineering Intern
- Configured and ran CNNs for image processing in high visual noise environment
- Prototyped LBP and image parsing algorithms in MATLAB and C++ as part of software client to identify defects in concrete railway ties - Ref. IS-2015-014

EDUCATION

B.S., Electrical Engineering – leave of absence   September 2014 – December 2017
A. James Clark School of Engineering, University Honors
University of Maryland, College Park