ANTON BILBAENO

cell ◇ email ◇ github

EDUCATION

M.S. Computer Science, Portland State University - 3.67 GPA Expected 2024
B.S. Electrical & Computer Engineering, Oregon State University - 3.4 GPA 2013

EXPERIENCE

Senior Software Engineer 11/21 - present
Software Technology Group *Beaverton, OR*
- Integration of sensors and PLC for acquisition of nanometer-precision height map of ceramic substrates. (C#)
- Mehanical design of robot end effector for United States Geological Survey soil sampling lab. (OpenSCAD)
- Architect back & front-end of medical wire spooling machine. (MongoDB/InfluxDB/Node-RED/JavaScript/Vue)

Software Engineer (2 years) 11/19 - 7/21
Dynamic Range Labs *Portland, OR*
- Develop electronics simulation application. Lead client communication, feature definition and implementation, scoping of new work & project management where I can save time for others. (SQL/C#/.NET/TypeScript/Vue)

Electrical Engineer (3 years) 7/16 - 7/19
Folktek *Portland, OR*
- Responsible for mix of projects (< 10) at low volumes ($< 5,000$) from idea to manufactured, tested PCBAs.
- Design analog and digital circuits for a variety of functions. Ensure audio signal integrity in mixed-signal designs with switching regulators. Embedded firmware for AVR microcontrollers (written in C).
- Leverage KiCad's Python API and an open-source tool for semi-automated PCB placement and layout.
- Grow team by 4x over a year (...from 1 to 4) to help with circuit prototyping & in-house PCB assembly.
- Design 3D printed bit for common nut to decrease assembly time by an order of magnitude.

Electrical Engineer (3 years) 7/13 - 7/16
Cinder Solutions *Hillsboro, OR*
- Primary role: electronics design (breadboard, schematic, PCB design, in-house SMT assembly, reflow & rework).
- Firmware for driving motors & solenoids, capacitive touch, communication over Serial, Bluetooth & WiFi.
- For a capacitive touch-screen manipulation interface: Create parametric model of design (Python, Eagle CAD API) to generate a PCB. This granted faster iterations and ease of systematically modifying parameters.
- For an IMU bench-marking project: Develop automated test execution and report generation (Python, bash).
- Save time for others by relentlessly organizing parts in spare moments.

Research Assistant (1 year) 6/11 - 6/12
Oregon State University *Corvallis, OR*
- Develop Verilog for FPGA to configure buffers and communicate with other hardware.

Various Restaurants & Kitchens, Soccer & Lacrosse Referee (9 years) 2003 - '12
- Restaurants teach you to move fast, prioritize efficiency, and constantly re-evaluate next steps.
- As a referee, you must establish relationships with everyone around you in order to ensure respect and safety.

PROJECTS

Wireless Hand Sensor A glove that controls a mouse cursor via motion and executes functions via touch from tip of thumb to inside of fingers. This project won second place in Texas Instruments' Analog Design Contest.

EXTRA

- Microsoft Certified: Azure Developer Associate — 2022
- Portland Startup Weekend: 1st Place — 2014, 2015