ANTON BILBAENO

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EDUCATION

Portland State University *April 2018 - expected 2022*
M.S. Computer Science
Oregon State University *September 2008 - June 2013*
B.S. Electrical & Computer Engineering

TECHNICAL STRENGTHS

Computer Languages	C, Python, Javascript, HTML, CSS, LaTeX, Verilog, ASM, C++
Electrical Engineering	Analog & Digital Circuit Design, PCB Manufacturing, Firmware
Libraries & Tools	KiCad, Eagle, SPICE, OpenSCAD, Inkscape, bash, git, vim, tmux, numpy, pandas, selenium, PLA 3D printer *(new: Django, Vue.js)*

EXPERIENCE

Folktek *July 2016 - Present*
Lead Electrical Engineer

- Manage products from idea to prototype to manufactured and tested units.
- Leverage KiCad Python API & various open-source tools for significant time savings on: BoMs, in-house SMT assembly, PCB placement, PCB routing & generating manufacturing documentation.
- Utilize git submodules to freeze footprint, symbol & schematic libraries to individual commits.
- Firmware for capacitive touch, sampling, motor control, basic logic, computations & clock outputs.
- Design (OpenSCAD) parametric 3D printed drill bit to cut assembly time by an order of magnitude.
- Hire and grow team size by roughly 3x over a year.

Cinder Solutions *July 2013 - July 2016*
Electrical Engineer

- Primary role: electronics design (breadboard, schematic, PCB layout, in-house SMT & TH)
- Various Python test automation projects: collection, parsing and analysis of IMU data; plot generation; r/w via sockets, Serial ports, Excel docs; mounting USB devices; automating website interactions.
- Increase precision and speed of iterations by parameterizing a touch screen test device in a Python module which generates the design in EagleCAD.
- Firmware for prototype μ-controller applications (motor control, low speed digital comm, BT, IMUs).

Oregon State University *June 2011 - June 2012*
Undergraduate Research Assistant

- Write basic Verilog for FPGA to initialize buffers, memory blocks and configure other hardware.

Sunset High School *June 2006 - June 2008*
Website Design & Administration

- Design and maintain lacrosse team's website. Self-taught and written in vanilla HTML.

Various Restaraunts & Kitchens *2005 - 2012*
Busser, server, kitchen prep

- I list this experience because these positions teach you to move fast and constantly re-evaluate efficiency.

RELEVANT COURSEWORK

Computer Science
Data Structures
Discrete Math
Comp. Org. & Assembly
Computer Networks
Programming Languages
Algorithms
Numerical Computation

Electrical Engineering
Analog Electronics
Digital Logic Design
Signals & Systems
Transmission Lines
Power Electronics
Elec. & Mag. Fields
Magnetics
Antennas & Propagation
VLSI Design

Mechanical Engineering
3D Modeling
Statics, Dynamics, Strengths
Control Systems

Math
Calculus III
Vector Calculus II
Applied Differential Eqs.
Statistics
Matrix & Power Series

Other
Engineering Economy
Macroeconomics
Technical Writing
Sustainability

ACADEMIC ACHIEVEMENTS

Oregon State University Honor Roll 2010, 2011

EXTRA-CURRICULAR

Portland Startup Weekend (1st Place) 2014, 2015

OTHER INTERESTS

Agriculture, Food Systems
Learning, Education Systems
Sound, Music
History, Philosophy