



# Richard Inocencio Smith

Corvallis, OR

(503) 347-1060

smithri2@oregonstate.edu

richard.inocencio.smith@gmail.com

## EDUCATION

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### Oregon State University

2016-Present

*Electrical & Computer Engineering*

- GPA: 3.82 (updated 2/24/2020)
- Honors Scholar, Academic Achievement Award

## WORK EXPERIENCE

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### ATI Specialty Alloys & Components

2019-2020

*Millersburg, OR*

- MECOP Student Engineer: Manage the execution of industrial power and controls projects for various facilities within a metals manufacturing plant.

### Oregon State University SIM Lab

2018-Present

- Lab Technical Assistant: Design and develop test benches in Python2.7, rapid hardware prototyping and PCB design.

### St. John's Ace Hardware

2016-2018

*Portland, OR*

- Sales Associate, Cashier: Inventory handling, managing main customer service desk, assisting and directing customers with product inquiries.

## SKILLS & TECHNICAL EXPERIENCE

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### Oregon State University AIAA Hybrid Rocket Team

2018-Present

- Launch & Flight Control Systems Engineer: Design and prototype ground equipment and avionics related to fueling, engine control, and remote telemetry for the 2019-2020 OSU Hybrid Rocket.

### Oregon State University Global Formula Racing Team

2016-2018

- cPowertrain Subteam Engineer: Designed an analog sensor CAN Bus interface based on an AVR microcontroller for datalogging. Assisted in manufacture of 2017 formula car main engine wiring harness.

### Computer & Programming Skills

- **Operating Systems:** Linux (primarily Debian), Windows 7/10, Mac OSX
- **Languages:** C, C++, Python, SystemVerilog
- **Tools:** Vim, Bash, Autodesk Inventor, Autodesk EAGLE, GCC/G++, Valgrind, Adobe Premiere Pro

### Personal Projects

- **OBDII Dash Logger:** Designed an microcontroller system to interface and record engine performance metrics via an ELM327 UART.
- **MQTT-based Appliance Automation:** Automated various household appliances using relay, ESP8266s, and a master control node running a Mosquitto broker and python script.
- **OpenCV-controlled Robot:** Used webcam, Python OpenCV, and a Raspberry Pi to help a simple robot navigate coordinate points on a 2D plane.
- **Python Chore Manager:** Designed a Python scheduling system to automatically rotate and assign chores to household roommates via email on a daily basis.