

STUDENT – Oregon State University

COLLEGE FOCUS: Electrical Engineering and Computer Science

Driven engineering candidate with experience in product design and fabrication. Experience with complex robotics designs through the FIRST Robotics program. Working on CS skills to become more well-rounded. Pursuing an electrical and computer engineering degree and computer science minor at Oregon State University. Seeking a summer internship.

Education

- 2018-2022 Oregon State University: Junior, BS Electrical Computer Engineering (ECE) and CS / Current GPA: **3.85**
- 2015 Portland Community College Machining Certification
- 2014-2018 Camas High School / GPA: **3.93** -- Top 4% Academic Awards

Technical Leadership Experience

- 2020 Flawless Photonics:
 - CAD design and general research for space manufacturing company
- 2015-2018 FIRST FRC Robotics:
 - Lead architect on mechanical system
 - 2018 Team Co-Driver and Logistics Officer, 1st place in all pre-World events
 - 2x PNW Regional Winner
 - Notable awards (Worlds): Excellence in Engineering, Innovation in Control, Semifinalist
 - Notable awards (Districts): Industrial Design
- 2010-2014 FIRST FLL Robotics:
 - Team lead in software and design
 - Notable awards (State): 1st Robot Design Innovation and Strategy, 1st Software Programming, 1st Core Values
 - Notable awards (Local): 1st Robot Performance, 1st Core Values, Rookie Award
- 2010-2021
 - Apartment handyman, landscape, equipment repair

Skills

- Programming languages – Python (skilled), MATLAB (skilled), Arduino C (developing), C (developing)
- Electrical system – Surface mount soldering and circuit debugging, FPGA programming in System Verilog HDL
- Circuit design software – KiCad (developing), EasyEDA (developing), LTSpice (skilled)
- Mechanical design software – SolidWorks (skilled), Autodesk Inventor (skilled), Fusion 360 (developing)
- CAM software – process code to CNC tools
- Machine tools – milling machine, lathe, CNC table router, and hand tools
- Pneumatic systems – system analysis, kinematic layout and design
- Understanding of Stage Gate development process
- Root cause analysis and problem solving
- Team collaboration and leadership

Community Outreach

- 2020 – Built bikes for underprivileged kids in time for Christmas with the J. Scott Campbell Foundation, Vancouver WA
- 2020 – Designed PPE parts in CAD, working with Camas High School robotics team to bring PPE to local hospitals
- 2019 – Mentor at Insitu Roboflight Academy summer camp, Bingen WA
- 2016 – Guatemala mission outreach, built foundation for a school with local team
- 2010 – 2018 - Multiple annual FIRST robotics outreach programs, community education, school presentations
- 2009 – Alexi's Garden outdoor development center volunteer award. Arc of Clark County supporting kids with special needs

Other Activities

- University upper-level mathematics, physics, and python programming tutoring: 3 hours/week
- Video editing, ultimate frisbee club, kiteboarding, cross country running, mountain and road biking, basketball