

# Thomas Snyder

snyderth@oregonstate.edu | 503.887.0982

## EDUCATION

### OREGON STATE UNIVERSITY

JUNIOR STANDING

HONORS BS COMPUTER  
ENGINEERING

Current GPA: 4.0

Expected Graduation June 2022

## SCOUTS

### EAGLE SCOUT | NOVEMBER, 2016

Eagle Project:

Tent carts for Sunset High School

Marching Band

Leadership:

Assistant Senior Patrol Leader • Patrol  
Leader • Assistant Patrol Leader

## VOLUNTEER WORK

Church:

Sound Technician • Bass Player • Youth  
Leadership

Missions:

Helene, Honduras • Reynosa, Mexico •  
Mission Connexion Conference

## PERSONAL PROJECTS

Bluetooth RGB keypad • Electric Guitar  
Distortion Pedal • Arch Linux •  
Self-balancing Robot • Hexcopter

## EXPERIENCE

### UNDERGRADUATE RESEARCH ASSISTANT

June 2018 – August 2018 & June 2019 – August 2019 | Corvallis, OR

- Implementing sensor fusion and state estimation via an Extended Kalman Filter
- Assembled a swarm of GRITSBot robots, modifying and flashing firmware
- Implemented autonomy and set up localization system for Crazyflie 2.0 drones using C

### WEBMASTER | INVENTORS ENTERPRISE

March 2018 – March 2019 | Corvallis, OR

- <https://inventorsenterprise.github.io/IE/>
- Developed a new website based on Materialize CSS

### MEMBER SERVICE REPRESENTATIVE | AAA CALL CENTER

Jun 2017 - Aug 2017 | Portland, OR

- Received service calls for stranded members
- Actively communicated with distressed individuals to gather information on the situation

## RESEARCH

- Computer vision tracking of UAVs
- Working to implement a heterogeneous swarm testbed
- Researching onboard UAV controller for stability despite erratic localization data

## SKILLS

Programming:

Java • C++ • Android • Arduino • Python • Matlab • Xamarin • C • SystemVerilog

Operating Systems:

Linux • Windows • FreeRTOS

Hardware:

PCB Design • Computer specifications • Computer assembly • Lab Equipment

Software:

Solidworks • LaTeX • KiCad • LTspice • ROS • Quartus Prime • Modelsim

## EXTRA-CURRICULAR

Feb, 2019	Jan, 2020	OSU GFR Driverless team
Oct, 2018	Jun, 2019	OSU USLI Rocket Avionics team
Jan, 2018	Feb, 2019	Bio medical Engineering Society
Nov, 2017	Jun, 2019	Inventors Enterprise
Oct, 2018	Jun, 2019	OSU Epic Movement Leadership

## AWARDS

2019	National	Andy Grove Intel Scholarship
2017	National	Oregon State University Presidential Scholarship
2017	1 <sup>st</sup>	George Fox Programming Contest