
Education

Portland State University, 2017-21 (expected)

B.S. in Computer Science and Mathematics (double major) | 4.0 GPA | Urban Honors College

Century High School, 2013-17

Honors Diploma | Valedictorian | Rigorous AP coursework in chemistry, biology, and physics

Experience

Undergraduate Researcher | Reichow Lab (PSU) | June 2019 - present

- Investigating structural and functional properties of connexin proteins through molecular dynamics simulations
- Currently preparing submission regarding electrostatic significance of NT domain in sheep Cx46/50
- Lab information can be found at pdx.edu/reichowlab, published abstract at [doi:10.1016/j.bpj.2019.11.1573](https://doi.org/10.1016/j.bpj.2019.11.1573)

Undergraduate Researcher | teuscher.:Lab (PSU) | December 2018 - present

- Studying artificial chemical oscillators as a medium for reservoir computing through stochastic simulation
- Explored machine learning security and neural network robustness through the one-pixel attack
- Lab information can be found at teuscher-lab.com, one-pixel research at cutt.ly/ExpOnePx

Software Consultant | SawStop | July 2018 - April 2019

- Designed, developed, built, and refined prototype for novel positioning system (Python, OpenCV, C++, RasPi)
- Continued support through product development process (details under NDA)

Computational Biology Intern | Oregon Health and Science University | June 2016 - August 2016

- Worked under Dr. Sergio Ojeda, Director (retired), Division of Neuroscience, ONPRC
 - Developed novel three-dimensional genome browser with built-in network visualizer - cutt.ly/OHSUGeneVis
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Activities

Portland State Aerospace Society | January 2018 - present

- Lead developer for OreSat's star tracking system
 - Providing additional software support for camera system and cirrus imaging project
 - More information can be found at oresat.org, psas.pdx.edu, and github.com/oresat
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Skills

| Python | SciPy / NumPy | OpenCV | PyTorch | C | C++ | Java |
| HTML / CSS / JS | Linux | NAMD | VMD | MDAnalysis | Git |

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