Dominic Daprano

domdaprano@gmail.com ⋄ Website

EDUCATION

Oregon State University   *2018-Present*
3.96 GPA
B.S. Computational Physics and B.S. Mathematics
Minor Computer Science
Anticipated completion June, 2022

RESEARCH EXPERIENCE

Oregon State University Chemistry Department   September 2021 - Present
Researcher   *Corvallis, Oregon*

· Designing programs to utilize fragmented Localization-Delocalization Matrices to predict molecule properties and generate new molecules.

Center For Qualitative Life Sciences   July 2019 - Present
Undergraduate Computational Scientist   *Corvallis, Oregon*

· Created pipeline to process data for the WWWPIC collaborative project.
· Leveraged XSEDE's cloud infrastructure to segment and classify hundreds of terabytes of video data efficiently.
· Developed visualization website by utilizing OmnisciDB, Crossfilter.js, and D3.js.
· Developed OpenCV segmentation utility to automate the processing of video data collected during cruises.

nexTC   June 2021 - September 2021
Lab Assistant   *Corvallis, Oregon*

· Studied and implemented processing techniques to make cheaper and better visibly transparent and electrically conductive thin films.
· Collected sample data using Ellipsometry and 4-point probe.

Oregon State University Graphics Department   July 2018 - June 2019
Research Assistant   *Corvallis, Oregon*

· Researched modeling snow by looking into different descriptions of motion.
· Studied the Finite Element and Material Point Methods for their applications in modeling snow particles.

TECHNICAL SKILLS

Programming	C++, Python, JavaScript, Java and Bash
Libraries	PyTorch, OpenCV, OpenMP, NumPy and Vue.js
Mathematics	Linear Algebra, Numerical Analysis and Differential Equations
Other	SLURM, SGE, Git, Linux, SQL, and Latex

AWARDS AND HONORS

Botand Gabor Eross Math Memorial Scholarship   June 2021

Scholarship derived from faculty nominations that recognizes excellent academic achievements in mathematics.

SURE Scholarship Recipient   June 2021

Summer research funding provided to help support students in STEM fields.

Dean's List   Fall 2018 - Present

Completed at least 12 graded credit hours with a 3.5 GPA or higher in each term.

EXTRACURRICULARS

Astronomy Club   2018 - Present
Outreach Officer

Planned meetings and maintained telescopes. Led public outreach by working with other organizations to expand and diversify club membership.