Conor Olive

conor@conorolive.com • conorolive.com

My Keys

`1F2B 7ADA 2E27 6047 B590 E35B 3621 1D68 C832 85D3`

Research Interests

Fluid Dynamics • Turbidity Currents • Geophysics • Numerical Methods • System Identification

Personal Interests

Mountaineering • Backpacking • Environmental Science • California Endemic Plants

Education

2022–2024	**University of California Merced** // 3.88 GPA B.Sc. in Applied Mathematics (Emph. Computer Science)
2018–2022	**Los Angeles Pierce College** // 3.53 GPA Computer Science

Research Experience

Fall 2023	**Augmented Box Model for Colliding Turbidity Currents** We attempt to use algorithmically drawn boxes on collisions in the shallow water equations as training data for identification of an ODE system governing the dynamics of colliding currents. Supervised by François Blanchette and Nathan Willis.
Summer 2023	**Reducing Inter-District Inequality as a Constrained Multi-Objective Optimization Problem** We proposed a model quantifying inter-district inequalities, minimized using constrained multi-objective optimization. Application to Alameda County reduced the mean-square deviation from average racial distributions by 83.1%. Supervised by Kyle Wright and Cory Mccullough.

Spring 2023	**Box Model Simulations of Turbidity Currents**
	We created software to model the spread of turbidity currents generated by deep-sea mining. The model uses the Box Model derived by height– and width– averaging the Navier-Stokes equations.
	Supervised by François Blanchette and Nathan Willis.

Presentations

January 2024	**2024 Joint Mathematical Meetings**
	Augmented Box Model for Colliding Turbidity Currents (Poster)
Summer 2023	**2023 UROC Summer Research Symposium**
	Reducing Inter-District Inequality as a Constrained Multi-Objective Optimization Problem (Poster)
Spring 2023	**2023 Central Valley Regional SIAM Student Chapter Conference**
	Box Model Simulations of Turbidity Currents (Poster)

Awards and Honors

Spring 2023	**First Place Undergraduate Poster**
	2023 Central Valley Regional SIAM Student Chapter Conference
2019–2020	**President's Honors** in Spring 2019 to Spring 2020
2022–2023	**Dean's Honor List** in Fall 2022 and Spring 2023
2023	**Chancellor's Honor List** in Spring 2023

Work Experience

2018	**Cleaner** at SoulCycle
	Performed routine janitorial and maintenance duties around the gym, including laundry
2018–2019	**Freelance Computer Science Tutor**
	Tutored private clients in lower–division computer science courses

Volunteer Experience

2020–Present	**Phonebanking** with Environmental Voter Project
	Participated in "get out the vote" phonebanking which strategically targets demographics who are likely to be environmentally–conscious and have inconsistently voted in recent elections as shown through public voter rolls.

Technologies

Proficient: Linux, Python, C/C++, LaTeX

Intermediate: Matlab, Java, Manim

Beginner: Fortran, R, Julia

Clubs & Organizations

2022–Present   **Treasurer** for IEEE at UC Merced

As the first treasurer of the IEEE at UC Merced, my responsibilities include managing funding, as well as maintaining the chapter website.

2020–2022   **Member** with Conjeo Valley Citizens' Climate Lobby

Languages Spoken

Native: English

Intermediate: Swedish

Beginner: Spanish, Norwegian

Other Accomplishments

California 14,000–foot Peak Ascents (4/11)

Mt. Williamson via West Face (class III)

Mt. Whitney via Mountaineers' Route (class III)

White Mountain Peak via Road (class I)

Mt. Tyndall via. North Rib (class III)