Wilson Schwegler

(925) 583-4116 | wschwegler21@gmail.com | https://wilsonschwegler.github.io/
Livermore, California

EDUCATION

University of California, Davis, Davis, CA
Master of Science, Computer Science   Expected   6/2027
Occidental College, Los Angeles, CA
Bachelor of Arts, Computer Science and Economics, Cum Laude, GPA: 3.60   Received   5/2025

SKILLS

Languages: Python, SQL, Java, C++, C, Kotlin, HTML
Libraries: PyTorch, TensorFlow, scikit-learn, YOLO, Pandas, NumPy, D3.js, Pybaseball
Methods: Supervised and unsupervised learning, multi-object tracking, performance optimization, metric development

WORK EXPERIENCE

Lawrence Livermore National Laboratory, *Graduate Student Intern*, Livermore, CA (6/2025 – 8/2025)
- Developed and optimized a multi-object tracking pipeline for NIF target capsules during chemical vapor deposition using YOLO, improving usability, tracking reliability, and metric extraction.
- Accelerated processing speeds by up to 2.3x through multi-GPU support, multiprocessing, and modular code refactoring.
- Developed new metrics to evaluate capsule behavior and experimental conditions over time.
- Presented weekly progress updates to a team of 5-8 staff scientists and communicated results at a summer research poster session.

Lawrence Livermore National Laboratory, *Computing Scholar Intern*, Livermore, CA (6/2024 – 8/2024)
- Collaborated with the Quantum Simulations Group on predictive modeling tasks.
- Applied supervised and unsupervised learning methods to predict bioactivity in PFAS molecules.
- Utilized a neural and graph neural network to predict the x-ray absorption spectra of amorphous carbon structures.
- Presented research findings at two summer research poster sessions to staff scientists and researchers.

Lawrence Livermore National Laboratory, *Physics with Phones App Developer*, Livermore, CA (6/2023 – 8/2023)
- Led the UI development for the Android version of the app.
- Created the graphing fragments, enabling users to visualize complex data trends effectively.
- Collaborated with a team of 5 members to refine app features and ensure seamless functionality.

Occidental College Athletics, *Games Management Assistant*, Los Angeles, CA (9/2021 – 5/2025)
- Supported multiple athletic programs by assisting with scoring, stat recording, and general manual labor required in setting up events as well as cleaning up post-event.

HONORS AND AWARDS

- **Department Letter of Commendation**, Economics Department, Occidental College (2025)
- **Pass with Distinction**, Economics Department, Occidental College (2025)
- **Bill Anderson Coaches' Award,** Occidental Baseball (2025)
- **SCIAC All-Academic Team**, Occidental College (2023, 2024, 2025)
- **Dean's List**, Occidental College (2021, 2023, 2024, 2025)

ACTIVITIES

Baseball, Occidental College (*Team Captain*)
- Led and motivated teammates, fostered teamwork, and served as a liaison between players and coaches.

The Hidden Opponent, Member, Occidental College, Los Angeles, CA
- Advocated for mental health awareness in athletics.

RELEVANT COURSEWORK

Computer Science: Machine Learning, Data Structures, Algorithms Analysis, Databases, Computer Graphics, Justice and Equity in Technology, Statistics, Discrete Math Through Cryptography, Linear Algebra

Economics: Game Theory, Econometrics, Macroeconomic Policy and Financial Markets, Microeconomic Theory, Macroeconomics, Empirical Financial Economics, and Environmental Economic Policy