

River Samet

Santa Monica, CA | (415) 226-9865 | riversamet@gmail.com | www.linkedin.com/in/river-samet | https://github.com/Riversamet

EDUCATION

University of California, Los Angeles (UCLA)

Graduated March 2026

Master of Science — Chemistry, computational emphasis | 3.89 GPA

University of California, Santa Barbara (UCSB)

Graduated June 2023

Bachelor of Science — Chemistry | 3.96 GPA

DATA SCIENCE/ANALYTICS AND RESEARCH EXPERIENCE

Graduate Student Researcher

October 2024-Present

Houk and Gutierrez Groups | University of California, Los Angeles

- Build 20+ Python and Bash pipelines to automate large-scale computational workflows, improving efficiency and reproducibility
- Apply machine learning, statistical modeling, and quantum mechanical calculations to analyze and predict 10+ different complex organic, organometallic, and biological reaction mechanisms
- Process and analyze molecular simulation datasets containing thousands of entries to extract quantitative insights into chemical and biological reaction dynamics
- Present technical insights weekly to interdisciplinary teams, translating complex analyses into clear conclusions
- Communicate complex technical concepts to large undergraduate audiences across five different chemistry courses while employed as a teaching assistant

Computational Chemistry Research Intern

June 2023-September 2024

Aue Group | University of California, Santa Barbara

- Developed workflows using Linux command-line tools to analyze multi-outcome reaction systems (5+ pathways), requiring complex data interpretation and classification
- Managed high-throughput execution and analysis of thousands of reaction simulation jobs using automated Bash scripting
- Identified five different novel organic reaction pathways through data-driven analysis and literature-informed modeling

Laboratory Research Intern

October 2022-January 2023

Zhang Group | University of California, Santa Barbara

- Analyzed experimental data (yield, purity, structure) to evaluate organic synthetic process efficiency and scalability
- Optimized reaction conditions using data-driven decision-making across cost, energy, safety, and performance metrics

Laboratory Research Intern

May 2022-October 2022

Reaction35, LLC | Goleta, CA

- Analyzed salt solubility and ion chromatography data in Microsoft Excel to identify trends and evaluate experimental outcomes
- Presented results in weekly meetings to technical and executive stakeholders to support data-informed process development

Laboratory Research Intern

October 2021-June 2022

McFarland Group | University of California, Santa Barbara

- Developed analytical methods using Microsoft Excel and Mathematica to extract quantitative kinetic insights from complex datasets with 10,000+ entries related to molten metal-catalyzed methane pyrolysis
- Presented technical results in weekly group meetings to interdisciplinary faculty, staff, and students

SKILLS

Programming Languages: Python, SQL, Linux/Bash, Mathematica | **Tools:** Pandas, Matplotlib, NumPy, TensorFlow, scikit-learn, pytraj, RDKit, MDTraj, Microsoft Office, Google Workspace | **Computational Chemistry:** Amber, Gaussian, PyMOL, Chimera, ORCA, GaussView, Molden | **Chemistry (other):** ChemDraw, spectroscopy (NMR, IR, UV-vis, absorption), chromatography (ion, column, thin-layer), mass spectrometry

PROJECTS & CERTIFICATIONS

Put future projects and certifications here