Sean Riedel

$303-243-2252 \mid sriedel@ucsc.edu$

Summary: I am a graduate student pursuing a research career in scientific computing and applied mathematics. I am interested in using high performance computing and mathematical models to solve problems relating to clean energy generation, energy storage, and climate modeling. I have experience conducting research in pure mathematics as well as applied and computational physics. I also have substantial teaching and leadership skills from my experience as a tutor and teaching assistant.

Education	 B.S. in Mathematics, University of California, Santa Cruz Minor in Physics GPA 3.9 	June 2021
	 Member of the NCAA Cross Country and Track teams M.S. in Applied Mathematics and Scientific Computing, University of California, Santa Cruz 	June 2022 expected
Experience	 Teaching Assistant, University of California, Santa Cruz Held discussion sections and office hours to help students with homework and exams. Graded and provided feedback to students on exams. 	Fall 2021
	 Summer Intern, Los Alamos National Laboratory X Computational Physics Division Implemented the Rutherford scattering model in a large, C++, Monte Carlo charged particle transport (CPT) code library Performed code to code verification using two other CPT codes at the laboratory 	Summer 2021
	 Math and Physics Tutor, UCSC Learning Support Services Conducted 3 weekly small group tutoring sessions focused on engagement of students Prepared weekly planning sheets with detailed activities Courses tutored for include: Waves and Optics, Real Analysis, Abstract Algebra, Linear Algebra, Vector Calculus and Discrete Mathematics. 	2019 - 2021
	 Undergraduate Researcher, Polymath Research Experience for Undergraduates Developed a visualization tool for representing convex geometries using circles in the plane Contributor on a paper with cohort of 12 students and our mentor Professor Kira Adaricheva 	Summer 2020
	 Program Mentor, UCSC Learning Support Services Trained and mentored other tutors Conducted quarterly performance reviews of other tutors 	2019
	 ATLAS electronics testing assistant, Santa Cruz Institute for Particle Physics Collected data used to analyze the effects of annealing on silicon strip particle detectors 	2018
Honors	Highest GPA of all UCSC male student athletes • Awarded for a GPA of 3.98 at the time	2019
	CoSIDA Academic All-District • Men's Track & Field/Cross Country	2020
Skills	Programming: C++, Matlab, Python, Fortran, Git IFTEX: Proficient in mathematical and scientific document typesetting	