Sean Riedel

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Summary: I am a graduate student pursuing a career in scientific computing and applied mathematics. I am looking for a job where I can use my analytical and computational problem solving skills to tackle real world problems that will help humanity thrive during the next century and beyond. I am especially interested in using mathematics and computing to pioneer new ways to mitigate the climate crisis.

June 2021

B.S. in Mathematics, University of California, Santa Cruz

• Minor in Physics

Education

	 Minform F hysics GPA 3.9 Member of the NCAA Cross Country and Track teams 	
	 M.S. in Applied Mathematics and Scientific Computing, University of California, Santa Cruz GPA 4.0 	June 2022 expected
Experience	 Teaching Assistant, University of California, Santa Cruz Held discussion sections and office hours to help students with courseworks. Graded and provided feedback to students on exams. Courses supported: Multivariate Calculus for Engineers, Mathematical Methods for Economists. 	Fall 2021 - Present
	 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. 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
	Men's Scholar-Athlete of the year • Coast-to-Coast Athletic Conference Cross Country awards	2021
Skills	Programming: C++, Matlab, Python, Fortran, Git L*TEX: Proficient in mathematical and scientific document typesetting	