Sean Riedel

303-243-2252 | sriedel@ucsc.edu

Summary

I am a motivated, excited, and extremely hardworking graduate student eager to learn as much as I possibly can about the universe. I have experience conducting research in pure mathematics as well as applied and computational physics. I also have substantial teaching experience from planning and facilitating weekly group tutoring sessions for undergraduate classes in math and physics.

Education

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

June 2021

- Minor in Physics
- GPA 3.9
- Member of the NCAA Cross Country and Track teams

Experience

Summer Intern, Los Alamos National Laboratory X Computational Summer 2021 Physics Division

- Implemented Monte Carlo methods for charged particle transport (CPT) in C++
- Performed verification and validation study of the CPT capabilities of various codes at the laboratory

Math and Physics Tutor, UCSC Learning Support Services

2019 - 2021

- Facilitated 3 times 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.

Undergraduate Researcher, Polymath Research Experience for Undergraduates

Summer 2020

- Personally responsible for developing a visualization tool for representing convex geometries using circles in the plane
- Worked on a paper with cohort of 12 students and our mentor Professor Kira Adaricheva

Program Mentor, UCSC Learning Support Services

2019

- Responsible for facilitating trainings and mentoring other tutors.
- Conducted quarterly performance reviews of other tutors.

Honors

Undergraduate Dean's Honors, UC Santa Cruz

 Fall 2017, Winter 2018, Spring 2018, Fall 2018, Fall 2019, Winter 2020, Spring 2020, Fall 2020

Highest GPA of all UCSC male student athletes

2018-2019

• Awarded for a GPA of 3.98 at the time

CoSIDA Academic All-District

2019-2020

• Men's Track & Field/Cross Country

Skills

Programming Languages: C++, Matlab, Python, Fortran LaTeX: Proficient in mathematical and scientific document typesetting Spanish: I am able to read, write, and speak Spanish at a basic level Mountain Unicycling: I enjoy riding my unicycle in places most people

would be scared to hike