# Russell, Ryan

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### Education

Masters of Science in Pure Mathematics - California State University, Long BeachMay 2020Bachelor's of Science in Mathematics - University of California, Los AngelesJanuary 2019Associate's in Mathematics, Associate's in Physics - Orange Coast College, Costa MesaJune 2016

### **Teaching Experience**

**Level 4 Tutor Expert** - Student Success Center at Coastline College

Spring 2019 - Spring 2020

- Compiled reference materials for all tutors on teaching Calculus proofs
- Explained complex processes and concepts for all collegiate Mathematics courses
- Tailored materials and approaches to students' background, needs, and expectations
- Encouraged student independence and understanding instead of memorization
- Guided students through online tools for Statistics course

#### Honors Math Teaching Assistant - Orange Coast College

Fall 2015 - Spring 2020

- Assigned, collected, and graded homework and exams for the following Honors Math courses:
  - o Calculus 1, 2, 3 (Single and Multivariable Calculus)
  - Linear Algebra and Differential Equations
  - o Discrete Mathematics and Calculus on Manifolds
- Taught standard problem solving strategies and proof writing techniques
- Collaborated with Professor on curriculum update based on student feedback and research in pedagogy
- Participated in meetings on curriculum design, textbook choice, and course materials
- Mentored students in navigating college courses and STEM transfer pathways
- Promoted Honors Math participation to underrepresented students

### **Graduate Student Grading Assistant** - California State University, Long Beach

Fall 2019

- Graded homework and exams for College Algebra class of ~200 students
- Planned and led bi-weekly problem solving sessions
- Collaborated with Professor on course organization and grading schemes
- Uplifted students confidence in Math via dialogue focused on student experiences

## **Entry Level Mathematics Tutor** - Self-Paced Math at Orange Coast College

Fall 2014 - Fall 2015

- Worked in a free Alternative Math program for racially and culturally diverse non-traditional students
- Focused on retention, remediation, and transfer level course preparation at students' own pace
- Assessed knowledge, identified individual study styles, and adjusted teaching techniques accordingly

### **Research Experience**

Research Areas: Low Dimensional Topology, Classical and Harmonic Analysis, and PDEs

Collaboration with Paata Ivanisvili, PhD - University of California, Irvine

Spring 2020

• **Submitted paper** on Exponential Integrability for log-concave measures

**Collaboration with Paata Ivanisvili, PhD** - University of California, Irvine

Winter 2020

• Contributed to studying the relationship between backwards heat inequality, a heat equation, and concavity

## **Collaboration with Ryan Blair, PhD** - California State University, Long Beach

Fall 2019

• Contributed to research on Knot Distortion on embedded surfaces

### Skills

- In-depth domain knowledge of graduate, undergraduate, and pre-college Mathematics
- Up-to-date with current education methods focusing on a dynamic, hands-on, student-centered approach
- Committed to preparing marginalized students for long-term academic and career success
- Effective written and oral communication with faculty and students of various cultures and backgrounds
- Flexible and quick in learning modern teaching tools, platforms, and technical skills

#### **Seminars and Conferences Attended**

### Number Theory, Analysis, and Geometric Topology in Southern California Area

• UCI Number Theory Day

Oct 12th, 2019

• UCR AMS Sectional Meeting

November 9th -10th, 2019 Fall 2019

• UCI Fall Quarter 2019 Harmonic Analysis seminars

Spring 2019

CSULB Geometric Topology Graduate Student SeminarUCLA/Caltech Analysis Seminars

Winter 2018