

Jay Bonthius

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🌐 www.jaybonthius.com

Education

M.A. – Applied Mathematics

University of California at San Diego – June 2019

B.S. – Mathematics

University of California at San Diego – June 2016

A.A. – Mathematics

Orange Coast College – December 2013

Teaching Experience

Teaching evaluations can be found at www.jaybonthius.com/evals

Graduate Teaching Assistant

UCSD Departments of Mathematics and Computer Science

Fall 2015 – present

I am a teaching assistant for the Departments of Mathematics and Computer Science at UCSD. My responsibilities include the planning and teaching of weekly discussion sections, holding office hours, writing and proctoring exams, and grading student work. I also provide one-on-one, drop-in tutoring through the UCSD Calculus Lab, serving students in UCSD's lower division math courses (primarily in calculus, differential equations, and linear algebra).

–PreCalculus

–Calculus 1

–Calculus 2

–Calculus 3

–Vector Calculus

–Linear Algebra

–Differential Equations

–Intro to Statistics and Probability

–Discrete Math and Algorithms

–Euclidean Geometry

Mathematics teacher

e³ Civic High School

Fall 2016

I taught one semester of high school mathematics at a San Diego charter school. My responsibilities as the teacher of record included developing curriculum consistent with the Common Core State Standards, holding daily lessons, performing frequent assessment of student performance, and managing the classroom. I also tutored in the after school tutorial program targeted at under-performing students.

–Precalculus

–Integrated Math I

–Math 1 Readiness

Graduate Teaching Associate

SDSU Department of Mathematics

Fall 2016

I served as a teaching associate during the Fall semester of 2016 at San Diego State University, with responsibilities including lesson planning, holding weekly discussion sections and office hours, grading exams and homework.

–Calculus II (Fall '16)

Tutoring Experience

Private Tutor

WyzAnt Inc.

June 2016 – present

I tutored high school and college math students, individually and in larger group settings, and in subjects anywhere from algebra to upper-division, proof-based math. My students have not only seen improvement in formal assessments, but have developed confidence in doing math.

Educational Technician

SD Miramar College Math Lab

Spring 2018

Under the direction of my supervisor, I assisted in planning, implementing and monitoring individualized educational programs for community college mathematics students. I also tutored students under a broad spectrum of courses.

Tutor

UCSD Calculus Lab

Fall 2015 – Spring 2016

I provided one-on-one, drop-in tutoring for students in UCSD's lower division math courses, primarily in calculus, differential equations, and linear algebra.

Workshop tutor

UCSD Office of Academic Support & Instructional Services

Winter 2015 – Spring 2016

I planned and coordinated twice-weekly supplemental workshops for undergraduate math courses. These collaborative workshops complemented the lectures, with a targeted emphasis on developing confidence in mathematics and alleviating math anxiety.

—Linear Algebra

—Calculus 1

Other Experience

Mathematics Education reading group

UC San Diego

2017 – present

I engage in a weekly mathematics education reading group with Dr. Guershon Harel, Dr. John Eggers, and a few graduate students. Our discussions vary, but we generally discussed the teaching of linear algebra, introductory proof, and first-semester calculus within the DNR framework. Our collection of readings can be found at www.jaybonthius.com/readings

Cognitive sciences of mathematics

UC San Diego

Winter 2018

I participated in a weekly discussion of current research in the field of cognitive science of mathematics with Dr. Rafael Núñez and other graduate students, with a focus on implications in mathematics education.