

Adrian Ferenc, PhD

SKILLS

Developer, educator, and mathematics PhD able to understand, break down, and creatively solve complex, technical problems; strong team-work, leadership, and written and oral communication skills with both expert and lay people cultivated during 10+ years of experience; and a mastery of: Javascript, Python, LaTeX, Mathematica, HTML, CSS, Django, Express.js, Flask, React, Node.js, MongoDB, Mongoose, PostgreSQL, SQL, Git/GitHub, Model View Controller, Model View Template, REST API

EXPERIENCE

Freelance Tutor, Los Angeles, CA — *Math and Science Tutor*
JANUARY, 2009 - PRESENT

- Tutor students ranging from middle school to upper-level college in math and science classes

The Waverly School, Pasadena, CA — *Math Teacher*
FEBRUARY, 2016 - JULY, 2020

- Taught math and programming classes ranging from beginning high school to college equivalent; developed curriculum for eight different courses by designing assignments, assessments, and course material; provided semi-annual narrative feedback for an average of 60 students per semester
- Served as Mathematics Curriculum Coordinator on a cross-divisional team of teachers and administrators for a school-wide reassessment of curriculum that established the school's mathematics scope and sequence for grades K-12
- Presented several times a year at open houses and back-to-school nights; conferenced daily with students and semi-annually with parents; delivered speeches honoring graduating seniors

University of California, Irvine — *Lecturer/Teaching Assistant*
SEPTEMBER, 2009 - SEPTEMBER, 2016

- Taught, developed curriculum, and wrote assignments for over 20 lower- and upper-college level math classes with class sizes ranging from 15 to 120 students
- Managed TAs and delegated responsibilities for the class

AWARDS AND WORKSHOPS

Professional Development in Diversity, Equity, and Inclusion

The Waverly School DEI Development Workshop 2019-2020 (planner, organizer, and facilitator); Teaching Tolerance, 2020; Visions Inc., 2018, 2019;

Graduate Assistance in Areas of National Need Fellow

University of California, Irvine, 2010, 2012, 2013, 2015

Outstanding Mathematics Teaching Assistant Award

University of California, Irvine, 2015

Benedict Freedman Senior Prize in Mathematics

Occidental College, 2008

EDUCATION

General Assembly, Remote
Software Engineering Immersive
JUNE, 2021 - AUGUST, 2021

- Learned and honed current best-practices for web development with an emphasis on the MERN Stack, working individually and as a member of a team

University of California, Irvine
PhD and MS in Mathematics

SEPTEMBER, 2009 - AUGUST, 2015

- Dissertation, "An Explicit Construction for Homotopy Monoidal Structure," in the area of Noncommutative Algebra

Occidental College, Los Angeles, CA
BA in Mathematics, with Honors

AUGUST, 2005 - MAY, 2008

FEATURED PROJECTS

Online Atlas of Integer Sequences

General Assembly, AUGUST, 2021

Technologies: HTML, CSS, Javascript, Mongoose, Express, React, Node.js, Axios, Bcrypt, Plotly.js

- The user has access to the OEIS with the UX overhauled; The user can view any sequence as a list or triangular array, with the ability to apply a modulus to the numbers and/or a color gradient indicating the modulus, allowing the user to get a better understanding of the sequence visually; The user can view as many terms as they like as a scatter plot, a logarithmic scatter plot, or a histogram

Battleship

General Assembly, JUNE, 2021

Technologies: Vanilla JS, HTML, CSS

- The user faces an AI opponent that makes optimal moves and is difficult to defeat; The user gets a running commentary on the game with respect to hits, misses, and sunk ships keeping the results clear