

## Raphael Reyna

Email: raphaelreyna@protonmail.com

Phone: (626) 384-1342

Site: www.rafaelreyna.works

### PROJECTS

#### Subseries Web App

A purely client side application written in vanilla JS. Uses WebGL to compute and render computationally expensive fractals in real time.

- **Languages Used:** HTML, Javascript, CSS
- **Technologies Used:** HTML 5 canvas' WebGL and 2D contexts

#### LWP Splitter

Fully containerized backend to a web app for studying Littlewood polynomials; generates and stores mathematical data in a PostgreSQL database. Provides a RESTful API for controlling the data generation process. Can also produce plots of SQL queries, as well as generate labeled training data for machine learning.

- **Languages Used:** Python, PL/pgSQL, SQL, Bash, YAML
- **Technologies Used:** Flask, Flask-Restful, Numpy, Pillow, PostgreSQL, Docker

#### Online Portfolio

A static website that serves as an online resume. Features custom animations using both the HTML 5 canvas 2D context and SVG.

- **Languages Used:** HTML 5, Javascript, CSS
- **Technologies Used:** HTML 5 canvas 2D context, SVG, Materialize CSS

#### BBMail

Server application that enables teachers to use the Blackboard learning management system via email, avoiding the web interface. Works by monitoring email accounts, acting only on emails from the user. Interfaces with Blackboard's website using selenium to drive a headless Chrome browser.

- **Languages Used:** Python
- **Technologies Used:** Selenium, Beautiful Soup 4, Python Standard Library

### RELEVANT EXPERIENCE

#### Cal Poly Pomona, Pomona, CA

*Mathematics Instructor*

##### 2015 - Present

Responsibilities included designing a course schedule, complete with lecture and evaluation material; as well as leading the class through the material and regularly conducting evaluations of student performance.

Courses taught:

- Calculus I *and* Calculus II
- College Algebra
- Trigonometry
- Remedial Mathematics

### EDUCATION

Cal Poly Pomona, Pomona, CA

B.S. Applied Mathematics and Statistics with a minor in Physics, 2015

M.S. Pure Mathematics, expected summer 2019

### RELEVANT SKILLS

\*Nix, Arduino, Bash, BSD, C, C++, Carthage, Clang, Cocoapods, Data Science, Docker, Emacs, ES6, Flask, Forecasting, Full stack web development, GCC, GDB, Git/Github, GPGPU, Unicorn, iOS, Linux, LLDB, macOS, Machine Learning, Make, Mathematica, Nginx, NodeJS, NPM, OpenCL, OpenGL, PID, Pip, PostgreSQL, PyPi, R/RStudio, Responsive web design, RESTful APIs, SQL, Time Series, UNIX, WebGL, Xcode,

### OTHER

3D Printing, CAD, Circuit Design, Hardware Design, Italian, Soldering, Spanish