Raphael Reyna

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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

PROJECTS

Subseries Web App

A client side web app to assist in research in number theory (written as a part of my Master's thesis on subseries of holomorphic functions). Constructs, evaluates and plots millions of complex valued functions in parallel. Utilized WebGL for general computing on the GPU. Utilized HTML5's *canvas* to create dynamic controls.

- **Languages Used:** HTML, Javascript, CSS
- **Platforms/Frameworks Used:** WebGL, HTML canvas API, Math.js

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
- **Libraries/Frameworks Used:** Selenium, Beautiful Soup 4, Python Standard Library

Wine Quality

A report on the analysis of various machine learning models to determine wine quality based on physical data. Involved designing and fitting various statistical models to wine data, and evaluating their performance in predicting wine quality.

- **Languages Used:** R, LaTeX
- **Technologies Used:** RStudio

TinyTerm

A macOS app; a small terminal emulator that lives in the menu bar. Uses the Darwin libraries to open a pseudo-terminal device file to maintain an interactive shell session going.

- **Languages Used:** Swift 4
- **Frameworks Used:** Darwin, Foundation, Cocoa

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

RELEVANT SKILLS

Linux, BSD, *Nix, macOS, Bash, Git/Github, Version Control, PyPi, Pip, Continuous Integration, Full Stack Development, Data Science, Machine Learning Algorithms, Time Series, Forecasting, GPGPU, OpenCL, OpenGL, C, C++, Make, GCC, clang, GDB, LLDB, XCode, Carthage, CocoaPods, NPM, Mathematica, R/RStudio, Emacs, Nginx, Gunicorn, Flask, REST API, Arduino, PID control

OTHER

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