Jason R. Chew

Software Engineer

(661) 964-8339 jrchew15@gmail.com Portfolio LinkedIn Github San Francisco / Bay Area

Skills

Frontend Tools JavaScript, Typescript, React / Redux, Node.js, HTML, CSS
Backend Frameworks Express.js, sequelize.js, Python, Flask, SQL, Docker, SQLAlchemy, PostgreSQL, Amazon Web Services (AWS)
Key Skills Agile development, Object-oriented programming (OOP), Test-driven development (TDD), Systems Design

Experience

App Academy - ***Software Engineering Assistant*** Jan 2023 - Present

- Debugs issues with React, backend servers (express, flask…), and deployment of applications, assisting clients in pushing fixes and new features to production regularly and quickly
- Administers mock technical interviews to sharpen data structures and algorithms (DS&A) skills for over 20 job-seekers
- Consults on systems design and UI/UX for software developers, providing feedback to make full stack applications more professional, secure, and intuitive

Futures Academy (Private school with single student classes) - ***Teacher / Mentor*** May 2021 - May 2022

- Managed the curriculum for 10+ different high school math and science courses simultaneously
- Maintained the coursework, exam schedule, and assignment grading for approximately 10 students at any time
- Tailored course curriculum to the learning needs of individual students between 8th-12th grade

Education

App Academy - Immersive software development course with focus on full stack web development.

University of California, Santa Cruz - *Ph D in Mathematics (in progress)*
Computational mathematics and numerical methods (Relevant teaching)

- Provided instruction regarding the root mathematical concepts involved in data modeling, including the nature of floating point numbers, strict definition of big O notation, and asymptotic behavior of errors

California Polytechnic State University (Cal Poly), San Luis Obispo - *Masters of Science in Mathematics*
The rate of convergence of the Kahler-Ricci Flow on a Torus (Research project)

- Used MATLAB's 3D surface rendering to visualize the evolution of metrics represented by a large matrix of floating points

California Polytechnic State University (Cal Poly), San Luis Obispo - *Bachelors of Science in Physics*

Projects

Word Play Puzzles (Python, Flask, JavaScript, React / Redux, PostgreSQL) Live Site | Github
An interactive puzzle platform taking inspiration from the New York Times Puzzles

- Utilized WordsAPI to validate words guessed by users and to then update the internal dictionary, so that developers did not need to create large seeds to emulate the English dictionary
- Constructed puzzle interface with geometrically calculated css values in order to deliver a lightweight, responsive UX regardless of user processing
- Stored files via an AWS S3 bucket to guarantee persistence of user data and to provide scalable storage and flexibility to meet the storage needs of features to be implemented in the future

Nah-sana (Python, Flask, JavaScript, React / Redux, HTML5, CSS3, PostgreSQL) Live Site | Github
A project management web application modeled after Asana

- Streamlined workflow by establishing git procedure for the project and advising teammates on managing merge conflicts
- Spearheaded design for the home page DOM structure to ensure consistent sizing across the platform
- Employed React Context and custom React hooks to build navigation bar dropdown menus from scratch, so that menu navigation is consistent throughout the application

NoiseFog (JavaScript, Sequelize, React / Redux, AWS, Express, HTML5, CSS3, PostgreSQL) Live Site | Github
An audio playing application and user-populated music library modeled after SoundCloud

- Constructed a REST server with Express and used authentication middleware like Helmet and Morgan for quick deployment while maintaining data security
- Designed a song queue that employs Redux to track the current playlist, giving the user the ability to listen to any song in their recently played by navigating in a single ul element