

SKILLS JavaScript, Ruby, React, Redux, Rails, HTML, CSS, SQL/Postgres, WordPress, MongoDB, Express.js, Node.js

PROJECTS

TagAlong | (*Mongodb, Express, React, Node.js, Google Map API*)

[live](#) | [github](#)

- Implemented User Auth by encrypting user details via the JSON Webtoken library to be sent over HTTP using Axios to be decrypted via the JWT-Decode library on the frontend.
- Wrote model level validations to check for inclusion of password/email upon login using the Validator.js library.
- Used Mongoose populate method to fetch underlying related data across multiple collections.

EweTube | (*React/Redux, Rails 5, PostgreSQL, HTML5, CSS, JavaScript, Amazon Web Services S3*)

[live](#) | [github](#)

- Integrated Redux with HTML5 media web components to create customized video playback for users.
- Harnessed the power of S3 through the creation of cloud functions to upload and delete files while protecting the API key and streamlining AWS API interaction through server side programming.
- Optimized backend routes and shape of front-end state to minimize load-time for process-heavy user experience, especially in user login-in, which relies heavily on preferences saved by a user in previous sessions.

Octet Stabilizer | (*JavaScripts, Canvas, HTML5, CSS*)

[live](#) | [github](#)

- Engineered layers of gaming complexity through the introduction of game state changes that rely on Object Oriented Programming techniques and conditional logic.
- Built a custom game engine using JavaScript that manages the movement mechanics of atoms with colliding physics that influence the gameplay experience.
- Incorporated a custom drawImage function to render different frames of the source image at calculated timepoints, creating smooth and visually appealing animation for game playable objects.

EXPERIENCE

Science/ Coding Teacher

Ephraim Williams College Prep Middle School

August 2020 - June 2021

- Served on a committee that examined the district's middle school Science curriculum and identified over two dozen issues, which led to an improvement plan for the 2021-2022 Science curriculum.
- Improved Life Sciences and Physical Sciences curriculum for science teachers across 4 campuses to use in their distance learning classes.
- Enhanced Apple's Community Education Initiative (CEI) Coding curriculum by being the first and only teacher to adapt programming concepts taught in iOS' Swift to JavaScript, HTML, and Dart.
- Created functional apps using Xcode and Android Studio to demonstrate the best practices for app-design, which contributed to an increase of over 200% in completed student App prototype pitches compared to the year before.

High School and Middle School Science Department Chair/ Teacher

Vacaville Christian School

August 2012 - June 2020

- Collaborated with other departments to create cross-discipline lesson plans, resulting in an over 50% increase in AP Exam pass rate from 2011.
- Supervised department budget of over \$8000 each year to provide critical lab equipment to every student, ensuring engaging lab activities in every Science classroom at least twice a month.
- Organized inquiry labs that teach skills such as population surveying techniques, analytical practices, and calculations, resulting in the highest Advanced Placement enrollment in that school's history.

EDUCATION

UC Davis School of Education - *Master of Arts (MA) in Education*, 2011-2013

UC Davis - *Bachelor of Science (BS) in Biological Sciences*, 2007-2011

AppAcademy - *Full Stack Development Certificate*, 2021