

Alexander Duveneck

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SKILLS Ruby, Ruby on Rails, JavaScript, jQuery, React, Redux, HTML5, CSS3, SCSS, SQL, MongoDB, AJAX, REST API, Git, AWS S3, TDD, RSpec, Machine Learning, R, Python, Object Oriented Programming, Functional Programming, Pair Programming,

PROJECTS

1000px (Ruby on Rails, React, Redux, Webpack, PostgreSQL, AWS S3, CSS3, SCSS)

[Live](#) | [Github](#)

Pixel-perfect tribute to 500px with full photo CRUD, seeded with my personal photos

- Paginated traditional index for implementing infinite scroll, reducing load time and enhancing user experience
- Reused HTML class assignment with SCSS mixins for cohesive styling and increased site performance
- Combined ActiveStorage with AWS S3 Buckets to store images in the cloud with image information in the database
- Designed database with numerous joins tables and indexed foreign keys to minimize data duplication and enhance data retrieval
- Utilized BCrypt's hashing algorithm with Auth Routes to secure user privacy and guide the user

GetYoked (Mongoose / MongoDB, Express, React, Node.js)

[Live](#) | [Github](#)

A simple, wholesome, fitness app that tracks your growth and gives you new workouts

- Refactored code into modular async await functions and callbacks to overcome promise racing and undocumented bugs
- Designed functions to automate content and formatting of the user's achievements, gamifying the UX
- Simplified database seeding by designing functions to automate properly formatted JSON objects with nested documents
- Leveraged Javascript's asynchronous single-threading with MongoDB's multi-threading for significantly higher data transfers

Sick Maps (JavaScript, D3)

[Live](#) | [Github](#)

Overlays historical disease data atop a geographic map of the US

- Leveraged D3's SVG creation with MapBox's mapping API to overlay statistical graphs atop of geographic data
- Implemented modals to overlay the visualization, providing a guided tour of the project and data
- Standardized variables across JS components to create a cohesive UX, such as integrating a timeline with the statistical data

EXPERIENCE

Bayer

West Sacramento, CA

Laboratory Technician

December 2017 – August 2018

- Crafted a web app with R-Shiny, HTML, and Javascript for interactive data analysis and visualization
- Identified shortcomings in preexisting software and developed an alternate pipeline to screen and analyze genetic data via machine learning, reducing wait time by 15 hours
- Benchmarked and optimized code to run on high-performance clusters, reducing execution time by an additional 90%
- Tracked weekly progress in bilateral meetings with supervisor and presented key findings to the end-client via reports and presentations

UC Davis Pre-Health Student Alliance

Davis, CA

Veterinary Medicine Programming Coordinator

October 2014 – September 2015

- Scheduled over 90 workshops with four fellow coordinators and our director
- Successfully recruited over 10,000 attendees to the largest Pre-Health Conference
- Designed and conducted personal outreach presentations to audience sizes of 20-40 in Sausalito and Berkeley

EDUCATION

App Academy

San Francisco, CA

Curriculum of Study in Web Development (Ruby on Rails and JavaScript)

August 2019 December 2019

University of California - Davis

Davis, CA

BS in Biology (Emphasis: Molecular and Cellular Biology); College of Biological Sciences

Class of 2017

BA in Economics; College of Letters and Science

Class of 2017

Minor in Statistics; College of Mathematics

Class of 2017