DAVID M GUDEMAN
software engineer

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SKILLS
React, Redux, Typescript, Javascript, Firebase, AWS, MongoDB, Ruby, Rails, SQL, HTML, CSS, Git

PROJECTS

Zelp (React, Typescript, Ruby on Rails, PostgreSQL, AWS, Google Maps)   Live Link | Github

Find local businesses with advanced searching capability
- Utilized React for user interface design, combined with Redux with Redux Toolkit in TypeScript for robust state management providing consistent and reliable user experience
- Implemented full Create, Read, Update, and Delete (CRUD) operations using PostgreSQL, and integrated Rails ActiveRecord for seamless data manipulation, enhanced with comprehensive authorization capabilities
- Incorporated AWS S3 to allow attachment of photos to reviews, enriching user interaction and allowing for scalability

Rack Overflow   (MongoDB, Expressjs, Reactjs Nodejs, AI integration)   Live Link| Github

Social application to connect people with specific conditions who want to work out
- Collaborated with a team of four software engineers, employing Agile methodologies and Git protected repositories bring cohesion to the team, to swiftly learn and apply a technology stack novel to us
- Leveraged MongoDB Atlas alongside Mongoose for data modeling, combined with Express.js and Node.js to enable fully validated CRUD operations allowing for reliable commenting and category searching of topics
- Spearheaded the integration of artificial intelligence through the ChatGPT API, facilitating automatic generation of initial responses to user queries, providing immediate feedback and enhancing the users experience
- Jointly handled responsibilities of deploying the application and authoring all backend code with another student colleague

Dive the Trieste   (Typescript, HTML, SCSS, canvas)   Live Link | Github

Educational application that emulates the historic dive of the Trieste into the Mariana trench
- Leveraged TypeScript to implement complex data typing, which enabled the computation of dynamic boundaries for sprites and sustained spatial resolution during dynamic viewport resizing allowing the app to be accurate on different screen sizes
- Designed with a 3 layer canvas to seamlessly provide user location information easily alternating with a submarine cockpit emulation exhibiting ocean life at 6 different depths and a visual representation on an ocean cross-section
- Implemented a Singleton design pattern, utilizing a publish/subscribe event propagation via a central bus. This structure facilitated consistent state sharing across the application, thereby guaranteeing reliable DOM rendering

EXPERIENCE

Owner

Advanced Psychiatric TMS   March 2002 - January 2014
- Wrote and implemented a comprehensive electronic record keeping system in Microsoft Access Database (SQL) to address all clinical records for 1200+ active patients and 30K prescriptions/yr enabling a 100% paperless medical practice
- Built all IT software and hardware to integrate five locations, two server rooms and 30 computers resulting in a integrated, comprehensive information system across all facilities

Behavioral Health Director

Ventura County   February 1999 - February 2002
- Spearheaded a large public agencie's expansion from an annual budget of $30 to $60 million dollars in 3 yrs administering an overhaul of the medical records for 2000 patients resulting compliance with Federal mandates
- Designed all forms for the Crisis Team and Inpatient unit using Access DB, resulting in improved patient care

EDUCATION

Web Development - *App Academy | Spring 2023*
Associate's of Science - Computer Science - *Foothill Community College | Dec 2019*
Neurophysiology Fellowship - *California Institute of Technology | June 1991*
Medical Doctorate - *UCLA | June 1989*
Master's Degree - Neurophysiology - *University of Kansas | June 1987*
Bachelor's of Science - Biology - *UCLA | June 1984*