Pawan Chahal

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Skills

React.js, Redux, JavaScript, Node, Express, Python, Flask, C++, SQL, postgreSQL, Sequelize, SQLAlchemy, HTML5, CSS3, AWS, Git, Docker, Mocha, TDD, OOP, ControlLogix, RSLogix, Ladder Logic, AutoCAD, Xilinx ISE, Matlab

Projects

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

JavaScript, React / Redux, postgreSQL, Express, Sequelize, CSS3, AWS, Heroku

e-Commerce web application to purchase video games and other related products (GameStop clone)

- Configured the Node backend with PostgreSQL, using the Sequelize ORM for validations and database queries
- Reduced needed PostgreSQL database tables by 25% and heavily DRYed up backend code by utilizing a one-to-many polymorphic table on the database level
- Utilized Redux architecture's unidirectional data flow with React for predictable state and reliable DOM rendering
- Connected the Express backend to AWS S3 for media storage and organization while maintaining content security with AWS IAM
- Designed dynamic data-visualizations with JavaScript implemented algorithms based on product ratings and reviews
- Improved user experience by developing responsive validation and error messages for required input & filtering out empty input

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

JavaScript, Python, React / Redux, postgreSQL, Flask, SQLAlchemy, CSS3, AWS, Docker, Heroku

Social networking web application for sharing pictures with friends and family (Instagram clone)

- Spearheaded management of the Github repository and issue workflow with automated Kanban board task creation to streamline the process of multiple developers working on various website features in tandem during a 1-week sprint
- Incorporated AWS API for user image upload on Posts to reduce load on the backend database and increase scalability of the application
- Designed social media follower and following functionality using a PostgreSQL many-to-many self-referential table relationship between the Users database table and itself, allowing accessibility to lists of other followed/following users in each user object
- Ensured user privacy and autonomy through frontend and backend authentication measures, allowing users to only make changes to their own profile, posts and comments

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

JavaScript, React / Redux, postgreSQL, Express, Sequelize, CSS3, MapBox API, Heroku

Full-stack web application inspired by AirBnb

- Managed the booking CRUD through customizing transactional database operations using PostgreSQL and reducing server load through the utilization of eager loading to extract data from multiple tables in a single query
- Integrated MapBox API with custom search functionality to dynamically present booking locations based on user parameters.
- Ensured the privacy and security of a User by implementing User Authentication with backend Auth routes as well as front end Auth routes that protect User data and restrict unauthorized Users from managing data that is not theirs

Experience

Owner/Operator | May 2014 - June 2021

Chevron

- Managed the day-to-day operations of a large volume c-store / gas station ($10 MM in revenue) and increased sales by developing a strong knowledge of c-store products and services
- Maintained, organized, and executed weekly sales reports, including analysis of factors affecting sales as relating to business productivity
- Provided extensive accounting services including payroll, accounts payables and receivables, budgeting, and banking duties
- Maintained effective liaison with vendors and suppliers to ensure timely and accurate delivery of gas supply and c-store merchandise
- Interview, hired, trained employees on duties, company's policies & customer service

Instrumentation & Controls Design Engineer | September 2012 - April 2014

Atlas Copco

- Worked closely with production, maintenance and engineering to establish optimized performance of all equipment and accurate design
- Provide recommended scope of work for projects and assisted in implementing approved system changes
- Assisted production personnel in resolving problems that may occur during the manufacturing and final inspection processes
- Meet with customers and company sales personnel and representatives both in-house and on site to assess unique applications requiring special design consideration
- Managed the installation and configuration of Allen Bradley PLCs and HMI hardware
- Programmed PLCs and HMI software and debugged their associated fault diagnostics
- Created electrical schematics using AutoCAD Electrical software

Education

App Academy | June 2021 | San Francisco, CA

Immersive software development course with focus on full stack web development

San Jose State University | Spring 2011 | San Jose, CA

Bachelor of Science in Electrical Engineering