Long Guan

Full Stack Software Engineer | Seattle, WA | long.w.guan@gmail.com
linkedin.com/in/longguan | github.com/long-guan **|** https://long-guan.github.io/portfolio/

TECHNICAL SKILLS

Programming Languages | JavaScript, Python, SQL, HTML, CSS
Front-End | React, Bootstrap, Tailwind
Back-End | Django, FastAPI, PostgreSQL, AWS RDS, Docker
System Design & Cloud | Domain-driver design, RESTful API, Microservices, AWS EC2, AWS Elastic Beanstalk

APPLICATION DEVELOPMENT EXPERIENCE

Stevens Pass iMap | Full-Stack Software Engineer | *GitHub* | *React, Django, Tailwind, PostgreSQL, AWS*   2023
Single-Page CRUD application to view, like, and add videos or comments to ski trails of Stevens Pass
- Utilized refresh tokens to grant authenticated users access, enhancing the user experience by enabling them to remain logged in for 7 days without the need to reenter credentials
- Converted all image formats to webP, increasing site load speeds by over 9% and reducing data consumption by the same margin while maintaining image quality
- Enables interaction with the map using solely frontend code, minimizing the need for API calls except when accessing videos or comments, ultimately reducing operational costs on the backend server
- Deployed Django backend server with PostgreSQL database using AWS Elastic Beanstalk, EC2, and RDS, enabling users to send API calls to the server from anywhere

Long Loved Classic Games | Full-Stack Software Engineer | *GitHub* | *HTML, CSS, JavaScript*   2023
A web application to play Battleship, Tic Tac Toe, and Lazy Knight built with vanilla HTML, CSS, and JS
- Implemented Minimax algorithm with recursion in Tic Tac Toe to create an unbeatable computer opponent
- Introduced variability in the computer's decision-making process for the next move in Tic Tac Toe by randomly selecting one of the moves that lead to the same outcome
- Leveraged breadth-first search algorithm in Lazy Knight to calculate the least number of moves required for the knight to travel from one square to another
- Utilized a set of boolean variables in Battleship to emulate human player logic, ensuring that the computer targets adjacent coordinates after landing a hit until the opponent's ship is sunk

Green Beings | Full-Stack Software Engineer | *GitHub* | *Bootstrap, Python, FastAPI, React, PostgreSQL*   2023
A planning application for users to plan/create communities and events to better the environment
- Secured site using JWT (JSON Web Token) for backend and frontend authentication and authorization
- Collaborated within an agile team of four, leveraging wireframes, user stories, and merge request reviews, resulting in enhanced flexibility and better communication

PROFESSIONAL EXPERIENCE

Barghausen Consulting Engineers, Inc | Design Engineer   2019–2023
- Designed and drafted construction plans for 60+ total projects in the west coast area with 15+ of the total projects being completely constructed
- Trained new engineers in Autodesk Civil 3D with emphasis on best practices and latest CAD features, resulting in their increased design efficiency and reduction in design errors
- Communicated effectively with contractors and clients to solve any unexpected construction problems, resulting in improved project timelines and enhanced client satisfaction

EDUCATION

Hack Reactor | Advanced Software Engineering Certificate   2023
University of Washington | Bachelor of Science in Civil Engineering   2019