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 | Python 3, JavaScript ES6+, SQL, HTML5, CSS
Front-End | DOM manipulation, React, React Hooks, Bootstrap, WebSockets
Back-End | Django 4, FastAPI, PostgreSQL
System Design | Microservices, Domain-driven design

APPLICATION DEVELOPMENT EXPERIENCE

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.

- Leveraged DOM manipulation combined with CSS effects to dynamically display game updates, enhancing the user experience and immersiveness
- Utilized object-oriented programming principles to encapsulate game data, establishing data abstraction that streamlined debugging processes and reduced the incidence of bugs
- Used 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

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

- Implemented JWT (JSON Web Token) Galvanize library for backend and frontend authentication and authorization to secure the site
- Employed normalized PostgreSQL to store users, events, and community data, resulting in increased performance, memory savings, and reduced data duplication
- 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 using the latest CAD features and shortcuts, leading to increased design efficiency and a reduction in design errors
- 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 with contractors and clients to solve any unexpected problems, resulting in improved project timelines and enhanced client satisfaction

Seattle Department of Transportation | Engineering Intern 2018–2019

- Independently conducted surveys and designed ADA-compliant curb ramp using a self-designed spreadsheet, leading to a significant reduction in design duration
- Collaborated with engineers to gather data and conduct field reviews for sidewalk projects in multiple phases, employing tools such as spreadsheets to expedite data collection

EDUCATION

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