WILL SHELLEY

(646) 484-1987   wjshelley5018@gmail.com   New York, NY   **PORTFOLIO**   **GITHUB**   **LINKEDIN**

SKILLS

JavaScript, React, Redux, HTML, CSS, Ruby, Ruby on Rails, Mongoose, MongoDB, Node.js, Express.js, SQL, SQLite3, PostgreSQL, Webpack, jQuery, Git, Heroku, Three.js, React Native, Swift, UIKit, SwiftUI, Java, Python, C++, UI/UX Design, Mobile Development

EDUCATION

BS Computer Science - Skidmore College   Spring 2021

Relevant Coursework - *Intro to Java, Data Structures in Python, Algorithms, Artificial Intelligence, Advanced Algorithms, Operating Systems, Linear Algebra, Discrete Structures and Logic, Computer Networks, Digital Image Processing, Computer Architecture and Organization, Software Engineering, Web Security*

Web Development - App Academy   Summer 2020

<3% acceptance rate with 1000+ intensive and fast-paced hours of full-stack TDD using modern frameworks

TECHNICAL PROJECTS

ELBOW ARCHIVE   (Rails, ReactJS, Redux, AWS, Heroku)   live | github

Facebook clone (single-page-app) where users can search/befriend other users, make posts, comments, likes, and upload photos.

- Designed a customized filter for responsive and real-time search for users without N + 1 database queries
- Implemented social network by creating a PostgreSQL table to track unique requests by senders and recipients
- Ensured user security and managed user editing access through frontend and backend authentication procedures
- Improved database efficiency by 30% utilizing one-to-many polymorphic associations

LeetWager (ExpressJS, NodeJS, ReactJS, Mongoose, CSS)   live | github

A web app where friends can create/bet on wagers, post messages, view stats, and base betting decisions on rolling odds

- Integrated two external APIs that served odds and results for wagers before condensing and normalizing data retrieved for reliable O(1) access time
- Reduced number of Mongo fetch requests by 50% and enhanced scalability via efficient chaining of asynchronous functions
- Improved data integrity through the utilization of reliable functions that calculated user-specific information based on pre-existing tables (followed "one-source-of-truth" design to reduce spatial complexity)

Virtually Pottery   (Vanilla JS, NodeJS, Webpack, ThreeJS, Sass, GitHub Pages)   live | github

Single-page interactive 3D pottery studio where the user can shape and glaze ceramics with an artistic toolkit

- Optimized performance of real-time object updates by setting a maximum vertex buffer size and selecting slices of the buffer to update the model's vertices
- Ensured realistic animation by calculating a user's wall-pulling speed relative to the wheel head speed, and created 3D effects with directional light and dynamic backgrounds

Adirondack Film Festival App   (React Native, Python, Flask)   live | github

Cross platform mobile app where users can schedule and search for events listed by the Adirondack Film Festival

- Constructed a seeded backend through scraping the client's past sites for relevant data and serving it to the frontend with Flask as the intermediary
- Incorporated timed notifications with a scheduling system, enabling users to add/remove events and manage corresponding notifications

EXPERIENCE

Computer Science Tutor

Skidmore College   Sep 2020 - Present

- Led over 3 group and individual tutoring sessions per week to assist peers with technical skills
- Devised efficient studying strategies for advanced software engineering classes e.g. artificial intelligence and algorithm design/analysis

Computer Science Instructor

Launch STEM   April 2019 - August 2019

- Introduced 50+ youths to object oriented programming and software development through lectures, in-depth tutorials, and practical assignments
- Coordinated material distribution and deployed to over 5 different locations around NYC