# Patricia Andrea de Guzman

# Software Engineer

Github | Portfolio | LinkedIn

Phone: +1 (646) 289-0395 E-mail: padgzmn@gmail.com Location: Jersey City, NJ

**SKILLS** 

Languages: JavaScript, Python, Ruby

Technologies/Libraries: React.js, Redux, Node.js, Express.js, Rails, jQuery, Axios, AWS S3, Google Platform Maps,

Socket.io

Databases: SQL, postgreSQL, MongoDB

Web Development: HTML5, CSS3, Sass, Git, Webpack, Rspec, TDD, OOP, REST

**PROJECTS** 

# YourBnB (Rails, React.js/Redux, JavaScript, PostgreSQL, HTML5, Sass)

Live Site | Github

A full-stack, single-page web application inspired by AirBnB.

- Implemented user authentication through BCrypt hashing function and session tokens to secure passwords and enable log-in/out functionality
- Employed Rails to implement CRUD functionalities using the MVC (Model-View-Controller) architecture, and created RESTful API routes to interact with React frontend
- Leveraged on Rails ActiveRecord associations and React components to keep code base DRY and modular
- Designed front-end using React hooks, utilized AJAX to make fetch requests, and Redux for state management, maintaining unidirectional data flow and for single source of information
- Leveraged AWS S3 for media storage, implement user image uploads, reducing server load and allowing for scalability of image services
- Incorporated an interactive map using Google Platform Maps API for listing location
- Integrated media queries to allow for a responsive web design

### Sorting Algorithm Viz (JavaScript, HTML5, Sass)

Live Site | Github

A JavaScript DOM manipulation visualization engine of various sorting algorithms in Vanilla JS.

- Built an object-oriented class system to enable sorting visualization of unsorted array of numbers
- Amplified the visualization experience by implementing sorting runtime using **JavaScript** setInterval() method
- Utilized JavaScript event listeners and query selectors to conditionally apply user input (i.e. update size, speed, play/stop button) and dynamically update the UI

## Task-It (MongoDB, Express.js, React.js/Redux, Node.js, Socket.io)

Live Site | Github

Project management tool web application that allows users to create projects and tasks for their teams, interact with team members through a live chat, and visualize individual project status.

- Spearheaded the frontend implementation of Projects and Tasks using React Hooks, including Axios fetch API requests, and redux for state management
- Integrated **Socket.io** to enable live chat within teams in a project
- Coordinated and collaborated with team members regarding debugging session, schedule, and utilized Github pull requests for proper git workflow and to appropriately address any merge conflicts

#### **EXPERIENCE**

### **MFS Consulting Engineers & Surveyors, DPC**

June 2018 - November 2021

Structural Engineer, Senior Staff I

- Executed structural and geotechnical analysis and design for various structures including stair towers, concrete foundations, and steel and wood frame structures, using softwares such as RISA-2D, RISA-3D, RISA Connections, RISA Foundation, and DeepEX.
- Developed construction documents including project drawings using softwares such as AutoCAD and Revit modeling.
- Performed construction inspections for various on-site field construction for approval.

#### **EDUCATION**

**App Academy -** 1000+ hour immersive full-stack web development program **New Jersey Institute of Technology -** B.S. Civil Engineering, Cum Laude

May - September 2022

June 2016 - May 2018