

Patricia Andrea de Guzman

Software Engineer | [Github](#) | [Portfolio](#) | [LinkedIn](#)

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SKILLS

Web Development: HTML5, CSS3, Sass, Git, Webpack, NPM, Heroku, RSpec, TDD, OOP, REST, ORM

Language: JavaScript, Python, Ruby

Technology/Library: React.js, Redux, Node.js, Express.js, Rails, jQuery, Axios, AWS S3, Socket.io

Database: SQL, PostgreSQL, MongoDB

PROJECTS

YourBnB (Rails, React.js/Redux, Node.js, PostgreSQL, 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, applied **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**

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

[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

Sorting Algorithm Viz (JavaScript, HTML5, CSS3)

[Live Site](#) | [GitHub](#)

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

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

EXPERIENCE

Structural Engineer, Senior Staff I

June 2018 – November 2021

MFS Consulting Engineers & Surveyors, DPC

- Executed structural and geotechnical analysis and design for structures including steel, concrete, and wood structures, using software and certify 100% compliance with building code and safety standards
- High-proficiency in producing deliverables such as construction drawing sets for projects using AutoCAD and Revit modeling software that allowed swift process for review, reducing allocated time estimation by ~50%
- Headed on-site field inspections and developed corresponding technical report within 24-hr of inspection for approval
- Contributed to the proposal development and cost estimation of projects with budgets ranging from \$5k-\$30k

EDUCATION

New Jersey Institute of Technology - BS Civil Engineering, Cum Laude

June 2016 - May 2018

App Academy - Immersive full-stack web development program

May 2022 - September 2022