

# Avani Muchhala

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LinkedIn: <https://www.linkedin.com/in/avanimuchhala> \* GitHub: <https://github.com/AvaniMuchhala>

Portfolio: <https://avanimuchhala.github.io/my-react-portfolio>

## SUMMARY

Aspiring software developer with full-stack web development certification, biomedical engineering degree, and medical imaging research experience. Strengths in attention to detail, independent and collaborative problem-solving, and leadership.

## TECHNICAL SKILLS

JavaScript, React.js, HTML, CSS, Bootstrap, Node.js, Express.js, Java, MySQL, MongoDB, GraphQL, Git/GitHub, MATLAB, 3D Slicer Software

## PROJECTS

*Journey Journals* / [journey-journals-2023.herokuapp.com](https://journey-journals-2023.herokuapp.com) / [github.com/AvaniMuchhala/journey-journals](https://github.com/AvaniMuchhala/journey-journals)

- Social media platform for travelers to log in and post about their adventures, interact with other users' posts on their feed, and follow/block and message other users
- Built using MERN Stack: MongoDB/Mongoose, Express.js, React.js, Node.js, GraphQL

*Workout Tracker* / [workout-tracker-2023.herokuapp.com](https://workout-tracker-2023.herokuapp.com) / [github.com/AvaniMuchhala/workout-tracker](https://github.com/AvaniMuchhala/workout-tracker)

- Web application for users to log their detailed workout routines on a calendar, retrieve exercise recommendations, track incomplete workouts, and view frequency and duration of completed workouts
- Built using HTML, CSS/Bootstrap, JavaScript, Node.js, Express.js, MySQL/Sequelize, Handlebars.js

*Word of My Life* / [avanimuchhala.github.io/word-of-my-life](https://avanimuchhala.github.io/word-of-my-life) / [github.com/AvaniMuchhala/word-of-my-life](https://github.com/AvaniMuchhala/word-of-my-life)

- Web application that generates a random word of the day, allows users to search up any word of their choice, and displays information about that word as well as related media (i.e. movies, books, and games)
- Built using HTML, CSS/Bulma, JavaScript, multiple third-party APIs

## EXPERIENCE

*Undergraduate Teaching Assistant* / Case Western Reserve University / Cleveland, OH Aug. 2021 – May 2022

- Led weekly recitations and office hours to reinforce programming fundamentals using MATLAB and Arduino as well as assist students with completing labs; graded final projects

*Undergraduate Research Assistant* / Case Western Reserve University / Cleveland, OH Jan. 2019 – Dec. 2021

- Constructed a radiomics-based machine learning model to predict treatment response and time to treatment from bowel MRE imaging of pediatric Crohn's disease, resulting in an abstract accepted at SPIE Conference 2022 and an abstract published in *The American Journal of Gastroenterology*
- Applied 3D Slicer image pre-processing techniques and MATLAB machine learning algorithms for medical image analytics used for disease diagnosis and treatment evaluation
- Co-authored a paper published in *Journal of Magnetic Resonance Imaging*

## EDUCATION

*University of Pennsylvania LPS Coding Boot Camp* / Philadelphia, PA Feb. 2023

- Full-stack web development certificate from 12-week immersive boot camp

*Case Western Reserve University* / Cleveland, OH May 2022

- Bachelor of Science in Engineering (B.S.E.) in Biomedical Engineering / Computer Science Minor

## AWARDS

The Gheorghe and Claudia Mateescu Award for Research in Imaging

May 2022