

Avani Muchhala

732-995-5457 * avani.muchhala@case.edu * Morganville, NJ
<https://avanimuchhala.github.io/my-portfolio>

OBJECTIVE

Seeking a software development position in which I can leverage my skills acquired from my diverse experiences with web development, biomedical engineering, and medical imaging research

EDUCATION

Penn LPS Coding Boot Camp

Feb. 2023

- 12-week immersive boot camp to learn full-stack web development. Skills: HTML, CSS, JavaScript, JQuery, Bootstrap, Node.js, Express.js, React.js, MongoDB, MySQL

B.S.E. in Biomedical Engineering, Case Western Reserve University, Cleveland, OH

May 2022

- GPA: 3.81/4.00

RELEVANT PROJECTS

Workout Tracker | <https://workout-tracker-2023.herokuapp.com/>

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

Word of My Life | <https://avanimuchhala.github.io/word-of-the-day-project/>

- 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

Aug. 2021 – May 2022

- Reinforced programming fundamentals using MATLAB and Arduino and assisted with completing labs during weekly recitations and office hours
- Graded final projects that combined data acquisition, GUI interface, signal processing, and data analysis

SOURCE Undergraduate Research Scholar, Case Western Reserve University

May 2020 – Aug. 2020

- Constructed a radiomics-based machine learning model to predict treatment response and time to treatment from bowel MRE imaging of pediatric Crohn's disease
- Co-authored an abstract published in *Gastroenterology*

Undergraduate Research Assistant, Case Western Reserve University

Jan. 2019 – Dec. 2021

- Assessed reproducibility and stability of radiomic textural features from MRI images of healthy brain tissue under varying image acquisition parameters
- Applied image pre-processing steps in 3D Slicer 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*, an abstract published in *The American Journal of Gastroenterology*, and an abstract accepted at SPIE Conference 2022

SKILLS

JavaScript, HTML, CSS, Java, MySQL, MongoDB, Git/GitHub, MATLAB, 3D Slicer Software

AWARDS

The Gheorghe and Claudia Mateescu Award for Research in Imaging

May 2022

Case Alumni Association Junior/Senior Scholarship

Apr. 2021