Calen Green

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Profile

Product-focused full-stack engineer specializing in web and mobile application development. I excel at building solutions rather than applications. Purposeful engineering drives my passion for playing a key role in a company's growth and success. I'm seeking a team with strong missions, goals, or values where my job makes an impact beyond just writing code. I have proven experience working all throughout the stack from scalable APIs to responsive frontend UIs built with TypeScript and React. I pride myself as an adaptable and coachable software developer that thrives in highly collaborative team environments.

Experience

Full-Stack Software Engineer. Edge Elk Grove, CA

- Summer 2024 4/24-9/24

- Debugged BE and FE code for the new brand's internal support application by extensive testing with logging frameworks and IDE tools like debug terminals; discovered errors, inefficiencies, and unhandled edge cases.
- Engineered new functionalities such as updating job details for Edge user accounts with Nest.js routes on the BE and UI card views built with React on the FE. Allowing Edge employees to update their titles in the database accordingly.
- Developed hooks and mutations to optimally access, update, or delete data with React useState components. Allowing the customer success team to properly associate/disassociate a review's mention to the correct employee for our partners.
- Worked in GitHub repositories by creating pull requests, resolving merge errors, and reviewing teammate code. Smoothing out the transition from a development to a production state application.

-Winter 2023-24 12/23-2/24

- Pulled partner transaction data with Nest.js controller, service, and repository routes implemented by me. Identifying transactional trends with different locations and POS integrations.
- Collaborated with the new intern closely. Spearheading tasks such as customer management pages through frequent communication and pair programming on Visual Studio. Further adding convenient data access for the customer success team.
- Contributed to the company's rebrand by refactoring logic in the new internal website. Adapting to a modern application.

-Summer 2023 4/23-9/23

- Developed Node.js routes for partner data using object-oriented code to collect employee data. Allowing the product and sales team to see employee metrics of the partners they've helped.
- Scaled ISA with optimized MongoDB querying by aggregation and indexing. Allowing specific filtration of large collections.
- Supported go-live of new point-of-sale systems by automating API integrations to pull transaction data of the new POS.
- Onboarded a new intern by providing mentorship on technical company processes, supporting daily tasking, and analyzing performance. Successfully adding an additional asset to the team that contributed to the development of the isa.
- Excelled in a collaborative team environment by contributing to company sprints, providing updates on work in progress along with suggesting new ideas for improvements and issues that could be fixed. Adding value beyond my assignment.

-Summer 2022 5/22-9/22

- Worked as a full-stack engineer as part of a scrum team. Adjusted to challenges quickly. Becoming an adaptable engineer.
- Carried out QA testing on new implementations by reporting issues and possibilities. Finding areas for improvement.
- Built a RESTful API map and table view with React and JavaScript routes. Showcasing details of Edge's partner locations using UI controls including location filters.

Education

Michigan State University. East Lansing, MI. 08/2021-05/2025.
Bachelor's Degree - Computer Science major (3.2 GPA), Business minor.
Relevant Coursework: Machine Learning, Artificial Intelligence, Computer Security, Web App Development, Mobile App Development, Database Systems, Object-Oriented Programming.

Projects

Movie Review Mobile Application (9/25-present)

This is the current app I am working on. Watching movies is something I really enjoy doing in my free time. So, I wanted to combine my technical skills with something I'm truly passionate about. My movie review app uses the public TMDb API to pull movie objects. These data entries have fields such as title, release date, cast members, and more! Using this data, authenticated users can log in and search movies by title name, actor, director, etc. When the user finds the movie they want, they simply click on it to open a dynamic movie details page to see additional information on that movie and give their rating on a scale from 0-10. I'm building this app with React Native, Expo, TypeScript, and Kotlin. Supported by my own MongoDB database containing movie, reviews, and user collections. This project demonstrates my full-stack mobile development skills, API expertise, and complex data aggregation skills. The goal for this app will be to get published to the app store and connect movie lovers across the world to each other!

Solar System Generator (1/25-4/25)

In my machine learning class at Michigan State, I worked on a semester long project where I developed a data model that predicts and generates solar systems based on exoplanet data from NASA's Exoplanet Science Institute that contains over 30 thousand entries of exoplanet data objects. These objects had information about stellar density, stellar gravity, planet orbital period, planet equilibrium temp, and much more. In this project I utilized many tools including python NumPy, sklearn Linear Regression, Support Vector Machine, Support Vector Regression, etc. This experiment resulted in R^2 scores of the 11 models that ranged from 0.43 to 0.967. Stellar density had the lowest score, and planet orbital period was the highest. This experiment demonstrates my deep skills in data engineering, data analysis, and neural networks. The goal of this project was to fill the observational holes caused by the extreme size and scale of space. This shows astronomers how even simple machine learning algorithms can uncover meaningful structure in complex, high-dimensional data. It also extended my understanding and interest in systems that blend scientific data with generative Artificial Intelligence approaches.

Personal Website (August 2025)

My personal portfolio website was built with HTML, CSS, Python, socket.io, AJAX, and JavaScript. Supported by an SQL database (MySQL) and Docker containerization. This website demonstrates my full-stack web development skills that I learned at MSU and gives a brief overview of who I am!