

Skills

- **Languages:** HTML, CSS, JavaScript, TypeScript, Python, Java, C++, C, SQL
- **Frameworks & Libraries:** React, Next.js, Vue.js, Tailwind CSS, Spring Boot, Flask, Pandas, Matplotlib, Seaborn, Beautiful Soup
- **Data Science & AI:** Scikit-learn, TensorFlow, PySpark, Databricks, Proficient in machine learning concepts
- **Other:** MySQL, Linux, Node.js, Docker, AWS, Jenkins, Git, Jira, JUnit, Selenium
- **Certificates:** AWS Solutions Architect Associate, AWS Cloud Practitioner

Experience

Software Engineer Intern **Benevity** **May 2023 – Aug 2023**

MEng Capstone Industry Project Internship

- Collaborated with a team to develop and deploy a feature similar to Spotify's yearly 'Wrapped' summaries for Benevity's platform (10M+ users).
- Practiced Agile methodology, held Sprints, maintained open communication with stakeholders on Slack and through weekly update meetings to demo progress, get feedback, and validate that expectations were met.
- Supported backend development, created RESTful APIs, and achieved response times under 200ms for simple processes and under 2s for complex processes using Java and Spring Boot.
- Utilized Figma to design infographics and workflows, and assisted the frontend lead with the development of the Vue.js components.
- Wrote JUnit tests to verify functionality, identify and resolve errors, resulting in bug-free code.
- Enabled faster and easier deployments to AWS by automating the process with a continuous integration and continuous deployment (CI/CD) pipeline built using Jenkins, Docker, and GitHub.
- Earned a satisfaction score of 95% from the industry sponsor client after the final presentation and demonstration.

Project Manager Intern **Siemens Energy** **May 2021 – Aug 2022**

- Improved project efficiency, and supported the lead project manager throughout multiple project lifecycles.
- Maintained client relations, and led meetings to deliver updates, address issues, provide solutions and outline the next steps.
- Reduced project delays by providing on-site support to the field service team with emergent needs or labor tasks.
- Achieved 100% compliance with site requirements by ensuring timely completion of service team certifications.
- Ensured projects stayed on track and within budget by tracking progress and expenses, and reporting to lead manager.
- Oversaw procurement and site logistics, resulting in smooth project operations and high service team satisfaction.

Education

Master of Engineering **University of Calgary** **Nov 2023**

- Specialization in Software Engineering, GPA: 3.9/4.0
- Principles of Software Development, Databases, Software Architecture, Machine Learning, Algorithms, Data Structures, Data Engineering, Big Data Analysis, Deep Learning, Dependability and Reliability of Systems

Bachelor of Science **University of Calgary** **Apr 2022**

- Major in Electrical Engineering, GPA: 3.4/4.0

Projects

The Podcast Platform **ChatGPT Integration**

Currently building

More info: <https://github.com/Nikhil-Naikar/The-Podcast-Platform>

- Creating an application for hosting podcasts with AI-powered features, including text-to-multiple-voices functionality and AI-generated images, with OpenAI integration.
- Implementing usage of Clerk to enable secure and reliable authentication and user management.

- Utilizing ShadCN component library, Tailwind CSS, TypeScript and React to design a beautiful user interface.

Airbnb Pricing Intelligence

Artificial Intelligence Model

More info: <https://github.com/Nikhil-Naikar/Airbnb-Pricing-Intelligence>

- Worked with a team to create an AI model to assist Airbnb hosts in setting competitive prices and to help customers evaluate pricing fairness.
- Significantly accelerated development by utilizing Databricks, PySpark, and Python.
- Improved efficiency by prompting ChatGPT to label the reviews as positive, neutral or negative.
- Preprocessed reviews to improve data quality, filtered for English reviews, removed punctuation and stop words.
- Built a Natural Language Processing model to perform sentiment data analysis on the remaining reviews.
- Utilized Machine Learning classification algorithms like Logistic regression, Random forest, and Naive bayes, and regression algorithms like Linear regression, Decision Tree, and Gradient boosting.

Clock In Clock Out

Full Stack App

More info: <https://github.com/Nikhil-Naikar/Clock-In-Clock-Out>

- Created a web app for restaurant businesses that allows employees to easily log in/out, clock in/out of shifts, and view their shift and pay history.
- Built RESTful APIs with Java and Spring Boot to separate the frontend and backend, resulting in an architecture that is highly flexible and adaptable to future changes.
- Utilized a MySQL database and wrote many SQL queries in the backend to retrieve and manipulate data, ensuring accurate and organized data management.
- Developed the Vue.js app using a component-based architecture, for easy addition of features, and utilized Pinia to manage the frontend data efficiently.
- Simplified deployment and operation of the app by creating Docker files for both the frontend and backend.

HNM Clothing Store

Database Design

More info: <https://github.com/Nikhil-Naikar/HNM-Clothing-Store>

- Collaborated with a team to develop an e-commerce website enabling users to browse and purchase clothing, while also allowing admin users to manage the inventory by adding, editing, or deleting items.
- Applied good relational database design practices like enhanced entity-relationship modelling to ensure robust data management.
- Implemented a SQLite database and used the SQLAlchemy library to efficiently execute numerous SQL queries.
- Developed the backend using Python and Flask, and created the frontend with Bootstrap components, HTML, CSS, and JavaScript to deliver a seamless user experience.

IMDB Sentiment Analysis

Neural Networks

More info: <https://github.com/Nikhil-Naikar/IMDB-Sentiment-Analysis>

- Built a reliable Deep learning model using the TensorFlow library to predict the correct sentiment for IMBD movie reviews with a dataset of 50000 rows.
- Improved data quality by performing multiple data cleaning steps like utilizing BeautifulSoup for HTML parsing, removing stop and non-alphabetic words, and Snowball Stemmer for word normalization.
- Optimized the model performance by fine tuning the hyperparameters and modifying the architecture, and utilized bag of words for better feature extraction.
- Achieved an accurate model with a training score of 88% and a testing score of 87%.

Volunteer

Mentor

Big Brothers Big Sisters

- Offered support and guidance to youth through frequent interactions, and participation in everyday activities such as tutoring, playing board games or sports, and building a positive relationship.