Karma Woeser

Portland, OR | karmawoeser1@gmail.com | <u>Linkedin</u> | <u>Github</u> | <u>Portfolio</u>

TECHNICAL SKILLS

Languages: Python, JavaScript, C
Technologies/Tools: React, Flask, Express, Pandas, NumPy, Scikit-learn, Tailwind CSS, Git, Linux, Docker, Jupyter, Node.js, MongoDB, MySQL, AWS

EXPERIENCE

Generative AI Intern   June 2024 – August 2024
Cognizant   *Remote*
- Supported the design and fine-tuning of **Generative AI models** under mentorship
- Conducted in-depth model evaluation using various metrics and fine-tuned **hyperparameters**

Data Analyst Intern   Sept 2022 – June 2023
University of Oregon Solar Radiation Monitoring Lab   *Eugene, OR*
- Developed **data collection scripts** to ensure **data integrity** across multiple monitoring stations.
- Automated data processing using **Pandas** and **NumPy**, improving efficiency in analyzing station data.
- Participated in **data collection** efforts, retrieving solar radiation data from various stations across Oregon.

PROJECTS

House Prices Predictor | *Python, Flask, Pandas, scikit-learn, Matplotlib*   <u>Github</u>
- Built a **machine learning pipeline** to predict house prices using a dataset of 1,460 homes and 79 features.
- Created a **Flask API** to integrate the trained machine learning model.
- Optimized **Random Forest and Gradient Boosting** models using GridSearchCV, reducing RMSE by 10%.
- Analyzed prediction accuracy using **scatter plots**, identifying the model's weaknesses and the impact of feature selection on overfitting.

Article Curation Platform | *TypeScript, React, Node.js, PostgreSQL, Tailwind CSS, Docker, AWS*   <u>App Link</u>
- Worked in a team to build a React frontend, using React Query to optimize **API requests** with caching, background updates, and **infinite pagination.**
- Designed the **Node.js** backend with **TS-rest API contracts**, ensuring strict type API communication.
- Designed a **PostgreSQL** backed moderation system to process and approve user submitted articles.
- Deployed on **AWS EC2** using Docker Compose with a self managed PostgreSQL instance.

AI Chatbot | React, Express, MongoDB, Clerk API and Google Gemini API   <u>App Link</u>
- Developing a full-stack AI chatbot application using **React** for the front-end and **Express** for the back-end, integrating **Google Gemini AI** for NLP
- Implemented **Clerk** for **user authentication** and management, enabling secure user sign-ups and logins.

EasyA – Grading Analysis App | *Python, Flask, JavaScript, MongoDB, Docker*   <u>Github</u>
- Developed **Flask RESTful APIs** to process and filter grading distributions.
- Integrated Chart.js to create interactive, real-time **grade trend visualizations**.
- Designed a **MongoDB** schema for efficient storage and querying of historical grading data.

Personal Website | *HTML, Tailwind CSS, JavaScript, React*   <u>App Link</u>
- Designed and developed a **personal portfolio** website to showcase projects, skills, and experience.
- Implemented a favorite movies component to dynamically fetch and display Letterboxd favorites using **web scraping**.

Tibetan Book Store | *React, Node.js, Express, MySQL, Docker*   <u>Github</u>
- Designed and implemented a **RESTful API** with Express to handle **CRUD** operations for book listings
- Integrated **MySQL** to store book data, ensuring efficient data handling
- Utilized **Docker** to ship and deploy the software on the server

EDUCATION

University of Oregon   Eugene, OR
BS in Computer Science, Minor in Math   *Graduation Date: June 2025*
Coursework/Clubs: **Leet Club**, Computer Architecture, **Data Structures and Algorithms II**, Operating Systems, **Machine Learning**, System and Security Administration, **Software Engineering**, Linear Algebra, Discrete Math