Domminic Mayer

707-350-3310 | Actively Relocating | domminicmayer@gmail.com

SUMMARY

A leadership-driven student with a strong passion for software engineering. Committed to continuous learning and adept at leveraging technologies to optimize applications and drive innovative solutions.

WORK EXPERIENCE

Redwood Materials **May 2024 - Dec 2024 (End of Internship)**

Software & Data Engineering Intern Reno, NV

(Python, AWS, React, PySpark, APIs, Tableau, Data Analysis, ETL, AWS Glue, AWS S3, Pandas)

- Worked in a Series D Start-up gaining invaluable experience, collaborating across Backend, Frontend, DevOps, and Data engineering teams to create projects and new infrastructure
- Architected and automated a config-driven ETL using AWS Glue and S3, automating the ingestion of SWE data into the data lake for development, reducing the need for an engineer in the workflow
- Integrated REST APIs for real-time metal price data and battery recycling material composition
- Developed and implemented data pipelines to help integrate an optimized battery recycling project, resulting in a **20%** increase in profit margins through improved material flow and contract fulfillment

EDUCATION

University of Nevada, Reno **Expected Graduation: May 2025**

B.S. in Computer Science and Engineering GPA: 3.2/4.0

- Member of UNR Association for Computing Machinery Club
- UNR 2023 Biggest Little Hackathon 1st Place

Coursework: Data Structures, Optimization of Algorithms, Testing/DevOps, Computer Networking, DBMS, Leadership for Engineers, Technical Communications, Design Patterns, ML, AI, Deep Learning

PROJECTS

MedPASS: Senior Capstone Project **Present**

(NextJS, Tailwind, FastAPI, Postgres, SQLAlchemy, NumPy, pandas, scikit-learn, PyTorch, Docker, Git)

- Leading a team of 4 through the full project lifecycle, from ideation to deployment, including UI/API wireframing, timeline management, and stakeholder communication
- Developing a full-stack web app to reduce USMLE Step 1 exam failures in medical students
- Implementing ML models to predict student performance and create a real-time analytics dashboard
- Designing scalable database & schema for complex educational data and personal information
- Utilizing pandas/numpy for data visualization of longitudinal analysis of student performance trends

Digital Pantry **2024**

(React, NextJS, Tailwind, MongoDB, Javascript, RESTful APIs, CI/CD, Testing, Postman)

- Created a full-stack app using Next.js, Tailwind, and a strong backend using FastAPI & MongoDB
- Implemented OpenAI's GPT-3 to dynamically generate customized meal recipes based on the user's existing pantry items, significantly improving user engagement through personalized suggestions
- Engineered robust testing & CI/CD and app deployments using PyTest, GitHub Actions, and Docker

Discord Bot Development **2023**

(Javascript, Discord.js, OpenAI, Postman, MongoDB, RESTful APIs, Python, Optimization)

- Developed a shared chat for ChatGPT using Discord/Mongo, delivering this innovative feature **four months ahead of OpenAI**'s official release additionally reducing the subscription cost by **94%**.

RESEARCH

MedPass: PREDICTIVE ANALYTICS FOR STUDENT SUCCESS **Present**

Conducting novel research at the intersection of computer science and medical education.