Jason Ouyang

jasonou@umich.edu • 248-480-3225 • https://github.com/71296976165

OBJECTIVE

Seeking entry-level software engineering role, with coursework in database management, AI, and UI/UX.

EDUCATION

University of Michigan   **Ann Arbor, MI**

Bachelor of Science in Computer Science, Bachelor of Science in Economics, Political Science Minor   *May 2024*

GPA: 3.57 / 4.00

Coursework: Computer Organization, Data Structures and Algorithms, Intro to Machine Learning, Database Management Systems, Introduction to Artificial Intelligence, Artificial Intelligence for Human Behavior, User Interface Design

PROJECT EXPERIENCE

Artificial Intelligence – Audio Emotion Classification with HuBERT   *January 2024 – April 2024*

- Designed architecture for a transformer-based machine learning model to classify audio tracks into three categories
- Tested and compared Hidden Markov Models, Convolutional Neural Networks, and a fine-tuned transformer-based HuBERT neural network in pytorch to classify music, achieving 88% test accuracy with HuBERT as our final model.

Frontend - Music Track Webpage   *January 2024 – April 2024*

- Built frontend of website with Bootstrap and Vue to display music track information for well-designed local webpage
- Incorporated iTunes API with Javascript and Vue calls to add real time track information for live search and filtering

Machine Learning – Movie Reviews with SVMs   *September 2023 – October 2023*

- Built a Support Vector Machine classifier with scikit learn on bag-of-words model to predict movie reviews
- Assessed and reported combinations and applications of hyperparameter tuning and advanced feature sets to select a model to test on a hidden test dataset, for a 100% score based on class position.

WORK EXPERIENCE

Diurnal Days Art   **Ann Arbor, MI**

Data Analyst   *September 2022 - Present*

- Built inventory management and sales management solution to assess stock counts and generate sales insights.
- Advised artist based on generated sales insights to niche down into a more specific genre and expand into new categories of products, which increased sales from under $1500 a year to over $25,000 annually in one year.

Marupo's Egg Tarts   **Ann Arbor, MI**

Baker, Salesperson   *May 2023 - Present*

- Presented story of egg tart and business to hundreds of people, including at Farmer's Markets and Google, resulting in increased brand awareness and 2 follow-up business opportunities.
- Managed the kitchen staff of four people to produce hundreds of premium pastries reliably and efficiently every week.
- Conducted long sales shifts at the Ann Arbor Farmer's Market and Google's Ann Arbor location, selling thousands of dollars of merchandise over the course of three months.

Studio Diag   **Troy, MI**

Founder   *January 2022 - Present*

- Founded a video game company to compile student org's art and writing into a single medium-length video game.
- Designed, built, tested, and released a full demo of a 16,000 word choose-your-own-adventure game, written in Python using the Ren'py framework over the course of a year.
- Managed schedules, updates, and dependencies to hit target timelines for ship dates on early alpha and demo builds.
- Analyzed user feedback and incorporated UI/UX improvements, resulting in a 20% improvement in user review scores.

SKILLS

- Programming Languages: C++/Python/SQL/JavaScript/Vue
- Frameworks: Bootstrap, VueJS
- Library: Scikit-learn, Pytorch, HMMLearn
- Soft skills: Leadership, mentorship, coaching, writing, reading, problem-solving.

ACTIVITIES

Executed eight month training regime for couch to marathon and ran marathon in 4:37   *March 2021 – November 2021*