Maxell G. Milay

Machine Learning Engineer & AI Software Developer

Cebu City, Cebu, Philippines | milaymaxell@gmail.com | +63 966 469 5096 | LinkedIn | Github | Portfolio

WORK EXPERIENCE

BPOSeats   **Mandaue City, Cebu**
Full Stack Web Developer   *September 2023 - Present*
- Pioneered the implementation of the company's first vector database in PostgreSQL, enabling the development of advanced AI retrieval algorithms
- Oversaw the initial planning and development phases of a machine learning productivity model projected to increase operational efficiency by 55%.
- Integrated Vue and Django unit tests into automated pipelines, reducing deployment failures to production by 80%.
- Optimized LLM API calls through prompt engineering, leading to a 40% decrease in service costs
- Built a help center chat bot that utilized Retrieval Augmented Generation, which was projected to reduce complaints to CX by 75%
- Created a pipeline migrating documentation data to the vector database, which enabled vector operations for the chatbot
- Debugged code, resulting in a significant decrease in bugs and contributing to a 65% increase in system availability.
- Assisted in developing an invoicing permission feature, providing granular access control and preventing potential unauthorized accesses.

Symph   **Cebu City, Cebu**
Web Developer Intern   *December 2022 - March 2023*
- Deployed and implemented changes to client websites in collaboration with backend and DevOps teams, ensuring minimal disruption.
- Addressed issues and implemented recommendations over 2 projects on existing client web pages, improving usability and customer satisfaction.
- Partnered with project managers to develop and execute comprehensive web projects, meeting client needs within timelines and budgets.

EDUCATION

University of the Philippines Cebu   **Cebu City, Cebu**
Bachelor of Science in Computer Science
- **Finite Automaton Visualizer** - A web application that generates DFA graphs based on regular expressions that verifies string inclusion

Philippine Science High School - Central Visayas Campus   **Argao, Cebu**
STEM Strand   *High Honors & Excellency in Physics*
- **Project DALOY** - Drone-based Depth and Atmospheric Level Open-Source monitoring device for the Filipino Youth
- **Thesis** - Simulated Biomimicry of Photovoltaic Tree Architecture Based on the Phyllotaxy and General Tree Crown Shape of *Pinus Strobus* (Eastern White Pine)

FEATURED PROJECTS

- **Beacon** - A career guidance application that utilizes generative AI to provide users with personalized visual roadmaps towards their viable career option based on their user profile information.
- **Handwritten Digit Classifier** - Neural network implementation of digit classification using the MNIST dataset
- **Lunar Lander** - Lunar lander Deep Q Learning using the Proximal Policy Optimization (PPO) Algorithm
- **Customer Segmentation -** An unsupervised customer classifier model using K-means clustering
- **House Pricing Prediction** - House pricing prediction using Linear, Random Forest, XGBoost, and CatBoost regressors

AWARDS & HONORS

Machine Learning Specialization   **DeepLearning.AI & Stanford**
- Completed 3 hands-on courses involving supervised, unsupervised, and reinforcement learning, along with neural networks using TensorFlow and Scikit-learn frameworks

Deep Learning Specialization   **DeepLearning.AI & Stanford**
- Completed 3 hands-on courses around neural networks, and learned various optimization techniques, along with ML development iteration best practices

Komsai Week 2024 Hackathon
1st Placer   **UP Computer Science Guild**
- Lead a team of 5 in building a working prototype of an AI assisted career guidance roadmap visualizer within the span of 6 hours

SKILLS & INTERESTS

- **Languages:** English, Filipino, Cebuano, Japanese (Introductory)
- **Hobbies:** Road Cycling, Hackathon, Physics
- **Programming Languages**: Javascript, Typescript, Python, C, C++
- **Technologies/Frameworks**: React, Next JS, Vue, Django, Express, Docker, PostgreSQL, LangChain, TensorFlow, Pandas, Numpy