Yuemeng Song

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www.linkedin.com/in/joysong-aka-pancake | CA/NY My Homepage

EDUCATION

New York University

New York, NY, United States

B.S. in Computer Science and B.F.A. in Interactive Media Arts | GPA: 3.6

expected: June 2026

Relative Courses: Data Structures, Discrete Mathematics, Data Management and Analysis, Computer Systems Organization, Physical Computing and Experimental Interfaces, Minds and Machines, Machine Learning, Deep Learning

SKILL

Coding Language: Java, Python, JavaScript, HTML, CSS, C++, LaTeX

Development Tools: Git, Github, Overleaf, Excel, VS Code, Eclipse, Docker

AI: numpy, pandas, openai API, Ollama, Machine Learning Algorithms, HuggingFace, Langchain, Chromadb, DeepSeek training, Llama3 training, torchtitan, PyTorch, HipBLASLt

Web Development: Figma, Streamlit, Miro, Arduino, p5js, DigitalOcean, GreenSock, npm, node.js, three.js, vercel, Wix, Notion Design Tools: Adobe Illustrator, Photoshop, After Effects, Clip Studio Paint, Procreate, Arduino, Arduino IDE, Autodesk Fusion, Canva Other: Programming, Physical Computation Design, User Experience Design, Wireframing and Mockup Design, Illustration, Animation

PROFESSIONAL EXPERIENCE

AMD-Xilinx San Jose, CA

Co-Op/Intern: Undergrad Tech

May2025 - August 2025

Trained and Tuned models with torchtitan's provided libraries and AMD Rocm system, 8 MI300X GPU. Tested the Tensile Tune and GEMM Tune workflow for Deepseek V2 Lite and Llama3, troubleshooted and documented the process

- Export GEMM shapes into a dump file, deduplicate, and tune using the optimized shapes
- Benchmarked and recorded performance numbers for the tuning
- Helped test the Profiling trace process for the models
- Looked into the torchtitan PR, Meta PR, marked down important PRs related to CPU GPU node sync, performance increase, FB8, fsdp, and MoE training fsdp support, added unit tests to the torchtitan GitHub
- Used tools: Utilized Docker, Digital Ocean, Tensile, torchtitan, Pytorch, hipBLASLt, Rocm, MI300X, excel, Python, Notion

Sensors Data Haidian, Beijing, China

Analytics and Creative Development Intern

June 2024 - August 2024

Developed a collaborative chatbot from scratch to analyze dynamic large scale datasets for validity check, trends, correlations, etc.

- Solution stack: python, javascript, Gradio, HuggingFaceEmbaddings, PandasAi, Langchain, Chromadb, Llama3
- Data Analysis: Used pandas to store dataframes, then imported the data to pandasai ydata profiling for overall data validity check
- Data Cleaning: Selectively filter and extract useful information, greatly reducing computing time and enhancing accuracy
- User Interface: Incorporated chat features via Chromadb to assist users, ensuring adherence to company guidelines and providing technical support for application navigation.
- Prompt engineering: Prompted instructions to Langchain and Llama3 and added example prompts for ease of use
- Performance Optimization: Provided performance analysis/optimization with different solutions for the chatbot

Align Tech Remote (CA)

Logo Designer

September 2020 - December 2020

- Using Adobe Illustrator and Adobe Photoshop, created logo templates for in-company teams
- Created official logos for in-company teams with weekly report and discussion meetings with client

PROJECT EXPERIENCE

Personalized Chatbot December 2023

Developed a Personalized chatbot with OpenAI API, node, js, npm, nodemon, javascript, html, and CSS

- Imported personality as document database for System instructions for the chatbot, and using Digital Ocean service as Cloud Host, provided online hosted 24-hour chatbot with customizable personalities
- Ensured strong personality and background (non-ai cognition) for the chatbot

Arduino Mystery Alarm

February 2024

Co-Developed an Interactive Alarm clock that doesn't stop until the player solves all 5 sides of the box puzzle

- materials: potentiometer, 3D printed knob, LED, buttons, Arcade buttons, Arcade Joystick, and OLED display, laser-cut shell, shift register, resin printers
- partial documentation: https://dylmcfar.notion.site/Project-1-Mystery-Controls-9070eab85d9944f182904d26696195a0
- coded with arduino 33IoT using C++

3D-Integrated Interactive Website

April 2024

Developed a Interactive website for 3D models using javascript, html, npm, three.js and raycasting models

- Using three.js structure and private models, built a website that plays audio and reacts to user clicks and keyboard inputs
- Added lighting and animation of the model with GreenSock

Official Website for Non-Profit Project

April 2024

Created website with Wix framework for non-profit project FireRoots

- Designed block interface for the blog section, integrated Wix, created domain name for the website, added donations panel, Abouts page, Front page, etc.
- Website: <u>www.fireroots.org</u>

LANGUAGES

- Chinese (Mandarin) Native
- English (Bilingual)