

Jiafeng Du

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EDUCATION

Northeastern University, San Jose, CA

Expected Graduation: Dec 2024

Master of Science in Computer Science, GPA: **3.89/4.0**

Related Coursework: DSA (C/C++), OOD (Java), Computer Graphics (C/C++)

TECHNICAL SKILLS

- **Programming:** C/C++, Java, Python, JavaScript, React, SQL, SML, Ruby, Racket, MUMPS/M
- **Software:** Docker, AWS, Django, ExpressJS/NodeJS, Langchain, Firebase, PostgreSQL, Linux

EXPERIENCE

Headstarter AI

July 2024 – Sep 2024

Software Engineer Fellow

- Developed **5+** projects in AI using **Next.js**, Material UI, APIs such as **Huggingface**, Pinecone, Stripe, Clerk, Firebase, and deployment with Vercel, AWS, and github
- Led a 4-person team by leading standup meetings, managed repo like resolving merge conflicts, providing feedback, suggestions, and debug help to teammates to construct a productive environment
- Using communities from linkedIn, reddit, and tiktok to actively pushing for publicity of our applications, resulted in **100+ users** for our products

Epic Systems Corporation (Healthcare IT Giant) Madison, WI

Aug 2021 - Sep 2022

Technical Solutions Engineer

- Led weekly meetings with five organizations to resolve support logs, manage **CI/CD** pipeline, and configure new functionalities to transform workflows like lung care management, resulting in happy clinicians whose job duty rely on accurate and responsive **reporting** and **patient communication**
- Reported bugs and identified enhancements by reviewing MUMPS/M codebase and reproducing bugs in support environment in our **Agile** development cycle by contribute to **200+** support log, QA note, and Design log to improving product success

PROJECTS

GrubGuide RAG (Restaurant recommendation AI) github.com/JiafengDu/grubguide-rag

Aug 2024

- Used **Yelp Fusion API** to generate local restaurant json at around UIUC area to obtain most to date restaurants information, increased our data accuracy by **20%**
- Used **Bert** as the text embedding model to convert the key information from restaurant json, resulting in better handling of OOV (out of vocabulary) by **90%**
- Used **Pinecone** as vector database and GPT-4.o-mini as the language model for RAG

Graphics Engine (OpenGL simplified) github.com/JiafengDu/s24-cs5310-proj10

Jul 2024

- Built using C language iteratively with **5000 lines**. It contains image, color, and graphics APIs
- Used Bresenham line drawing algorithm to implement graphics primitives like polygons, and improved drawing speed by **50% on CPU**
- Implemented Bezier Surfaces, and other graphic primitives like sphere using various subdivisions techniques
- Used modular system and perspective view to display graphic primitives
- Implemented Z-buffer rendering, different light objects, and Gouraud shading algorithm

Open Edx Greetings Extension github.com/JiafengDu/greetings

Jun 2023

- Provided a **REST API** endpoint for the Open Edx instance to save user greetings and provide responses
- Utilized **Docker**, Open Edx, Tutor (distribution), Django, and AWS (EC2/Cloud9), **PostgreSQL**