

Manfred Fong

Roslyn, NY | (646) 255-3336 | fongmanfred@gmail.com

[Portfolio](#) / [LinkedIn](#) / [GitHub](#)

Education

University at Albany, State University of New York – Albany, NY

August 2024

Bachelor of Science in Computer Science, Minor in Informatics

Institute of Electrical and Electronics Engineers (IEEE)

January 2022 - Present

- Spearheading over 250 hours of hands-on mastery of programming fundamentals, data structures & algorithms
- Participated in annual Hackathons such as HackRPI & Hack a Damian. Led professional training workshops and coaching to high school students
- Liaison between industry professionals from IBM, Celsius, and Wolfjaw Studios, to secure sponsorships, mentorship programs, and workshops

Personal Projects & Professional Experience

IBM - GenAI Multimodal User Profile Generator Project

Feb 2024-Present

Software Engineer/Researcher

- Lead the python development of an AI Chat Assistant chatbot utilizing the LangChain framework, sponsored by IBM, with emphasis on improving its personalized resume recommendation feature
- Employed different APIs including ProxyCurl and Tavily to integrate web search functionality, enabling the chatbot to seek real-time information and resources among the top 100 websites
- Achieved 90% context response accuracy by implementing local memory feature with advanced N.L.P.
- Optimized for scalability, achieved 99.9% uptime; reducing response time by 25%.

Personal Portfolio Website

Primary Developer

Feb 2024- Present

- Designed the website using modern web technologies including ReactJS, TailwindCSS, NodeJS, and Vite.
- Implemented responsive designs incorporating fluid layouts and media queries for optimal viewing across devices.
- Incorporated an interactive and user-friendly interface featuring animations, transitions, and intuitive navigation to engage visitors and highlight key content.

Assembler Program

Primary Developer

Sept 2022- Dec 2022

- Converted thousands of interrelated data points (100MB) into a single equation through interpolation.
- Incorporated an lexical analyzer for encoding and decoding, with internal storage up to 1000 tokens
- Implemented error handling mechanisms to report syntax errors, undefined symbols, and invalid instructions

SpaceTime - Full Stack Event Planning Web Application

Feb 2022- May2022

Lead Frontend Developer

- Enabled account holders to plan/organize social events of hundreds of participants.
- Served as Scrum Master for 2-week Sprint 2 in an 8-week Agile team project, managing frontend development
- Spearheaded frontend development, contributing 400+ lines of code. Implementing code splitting to reduce initial load time by 30% and lazy loading images to decrease data usage by 25%.

Skills: React, JavaScript, TypeScript, HTML, CSS, Python, Java, Node.JS, SQL, MongoDB, LangChain, Prompt Engineering, Angular, Git, Debugging/Testing.