VINCENT QI

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

BS, Computer Science

Aug. 2024 – May 2028

GPA: 4.0

Dean's List with High Honors

EMPLOYMENT / EXPERIENCE

Fullstack, Founding Software Engineer

July 2022 – January 2025

EduBeyond Education Inc.

Vancouver, BC

- Developed EduBeyond's new complete fullstack Learning Management System software in 2 months.
- Engineered token parser in **TypeScript** that converted and displayed OpenAl SDK output from XML to real-time frontend React components.
- Scaled API routes and PDF optical character recognition (OCR) pipeline to generate 100,000+ personalized real-time practice questions by architecting a minimal-latency AWS S3 and PineconeDB file storage system.
- Architected Retrieval Augmented Generation pipeline with the OpenAl SDK and developed semantic vector reranking algorithm using logit bias.
- Integrated CI/CD pipelines using GitHub, Vercel, and Fly.io to deploy massively scalable cloud infrastructure.
- Led, managed, and collaborated within an AGILE team to push out stable feature updates weekly.

Software Developer

September 2024 – Present

ScottyLabs Pittsburgh, PA

- Spearheaded integration of LevenDist algorithm with mapping software to improve search query results.
- Developed React and TailwindUI frontend to interface and display geolocation and mapping algorithm results.

PROJECTS

EduBeyond

- Deployed globally to Indonesia's largest telecommunications company with over \$ 400 M ARR.
- Formally endorsed by the **United Nations** and the *Office of the Presidency of Indonesia* as a high impact EdTech startup.
- Independent Software Vendor (ISV) partner with Google and Amazon's Edstart portfolio.
- Won 1st at global Moonshot awards (1st of 1500 companies), finalist for Samsung's Solve for Tomorrow.

Blockout

- Developed a published Minecraft minigame mod using Java and the Forge API to interface with the game's source code that adds a multiplayer bingo minigame.
- Utilized **Gradle** to handle compilation and deployment across multiple Minecraft versions.

RESEARCH / PUBLICATIONS

Multimodal Retrieval Augmented Feature Extrator — Co-First Author

University of Michigan, Al Symposium

- Architected education-oriented Chain of Thought and Retrival Augmented Generation LLMs with Berkeley Al Lab (BAIR) researchers.
- Engineered a YOLOv8 based pipeline that converted science textbooks into a novel dataset for experimentation.
- Refined and processed experiment results using **Python** and **NumPy** for in-depth analysis.

TECHNICAL SKILLS

Languages: TypeScript/JavaScript, Python, Java, HTML/CSS, Swift, C/C++, C# **Frameworks**: ReactTS/JS, Nextjs, Node.js, Express, TailwindUI, SwiftUI, Unity

Databases: Postgres SQL, MongoDB, PineconeDB

Tools: Git, CI/CD, AWS S3, Vercel, OpenAl SDK, Docker, Gradle, Websocket