MARCO ZHUANG

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EDUCATION

Cornell Tech (Cornell University), New York, NY

May 2025

Dual MSc in Information Science and Information System | GPA: 4.0

- Honors/Awards: Cornell Merit-Scholarship
- Relevant Courses: Machine Learning Engineering, Algorithm & Data Structure, NLP, Building Software, Applied Data Science

Tsinghua University, Beijing, China

Jun 2023

BEng in Industrial Engineering

Honors/Awards: government merit-based scholarship (1 of 15 recipients state-wide, 2021);

EXPERIENCE

Showcse, Co-founder, New York, NY, [link]

Jan 2024 – Present

- Building influencer marketing platform using Nextjs and MongoDB, currently serving 3 clients and 100+ influencers, with 2k MRR.
- Drafted PRD (user flow/stories), product roadmap in Jira, and prioritized feature development to increase market reach.

4149AI, AI Product Management Intern, New York, NY

Dec 2023 - May 2024

- Collaborated with 3 prioritized clients and developed 12 client-specific task blueprints, increased client engagement rate by 33%.
- Refined onboarding process by reducing user journey, facilitating earlier user interaction, onboarded 80% beta waitlist user.
- Assisted CEO with automated task scheduler by defining feature logic and user journey, adopted by **all** beta clients.
- Spearheaded competitor analysis on 24 products, presented findings to key stakeholders and investors on product differentiation.
- Conducted bi-weekly interviews with **9 clients** for update feedback and emerging pain points, reported to CEO.
- Built in-house GraphRAG query tool with Docker, NebulaGraph, LlamaIndex on linux system.

Bytedance, Product Management Intern, Beijing, China

Mar 2022 – Aug 2022

- Conducted user profiling on 6 competitors through 200+ user surveys, concluded 4 general user habits, finalized UGC toolkit logic
 and user interface design, achieving 6,000+ monthly active creator within a month.
- Co-lead 31 expert interviews, compiled 7 feature trends, ideated 15 content ideas, 3 were adopted and launched with the product.
- Synthesized investment thesis, competitor analysis, and product performance evaluation into the internal pitchbook, resulting in a long-term collaboration and introduction of a leading VR UGC platform onto Pico ecosystem.

WeWork, Business Intelligence and Data Analyst Intern, Shanghai, China

Jun 2021 – Sept 2021

- Initiated the WeWork China sales funnel project; developed detailed data-driven roadmap dashboard to streamline the end-to-end sales process by identifying and solving bottlenecks using SQL and PowerBI, decision increased customer conversion rate by 15%.
- Optimized product offering and pricing by conducting competitive analysis of the Shanghai co-working office market through data collection from 20+ onsite field research and 15 annual reports.
- Created sales personnel performance dashboard With PowerBI using SQL and excel for HR management decisions.

PROJECTS

LLM - RepoRover | Python, Langchain, OpenAI, FAISS, Streamlit | Deployed Appl

Dec 2023 – Jan 2024

Developer chatbot tool for helping users understand GitHub repositories

- Built and deployed a chatbot for open-source repositories using streamlit with OpenAI's GPT-3.5 turbo.
- Implemented retrieval augmented generation (RAG) using LangChain and FAISS by chunking file structure, repo code content, and Readme file.
- Incorporate prompt engineering to complement RAG output for narrowing query scope, enhancing response precision by 20%.

Machine Learning - MiniTorch | Python, NumPy, Numba, CUDA | [link]

Aug 2023 – Dec 2023

Full re-implementation of the deep learning framework PyTorch

- Optimized performance of back-end operations by adding parallelization and GPU compatibility using CUDA and Numba.
- Implemented Tensor auto-differentiation through topological sort on computation graph and chain rule backpropagation.
- Built and trained LeNet CNN using Minitorch APIs to perform twitter sentiment analysis and MNIST image classification, achieved 98.7% accuracy rate.

EXTRACURRICULAR ACTIVITIES

BanQu APP - Startup, Head of Product Development, Beijing, China

Oct 2020 - May 2021

- Grew user interest by 400% via generating partnerships with 2 universities (THU, PKU) and accessing 8,000+ students.
- Drafted a 2-year product roadmap for community features and enabling closed-loop user experience.
- Collaborated with 11 overseas software engineers to develop and refine product features for product beta launch.

ADDITIONAL INFORMATION

Technical Skills: Python, Pytorch, Langchain, SQL, HTML, CSS, Jira, R, JavaScript, Hadoop, Spark, C, C++, PowerBI **Languages**: English (Native), Mandarin (Native), German (Fluent)

Hobbies: Basketball: Tsinghua Dept. Team Captain, Winner of state-wide high school league 2018, Shanghai Junior NBA Most Improved Player 2019; Football: Team Captain 2019; Piano: Level 10 Certification from Shanghai Conservatory of Music