

Yunze Liao

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EDUCATION

University of Illinois Urbana-Champaign, Gies College of Business
Master of Science in Financial Engineering (STEM designated program); GPA: 3.8/4.0
Dr.Xiongwei Ju Scholarship Award Winner
Concentration: Computer Science & Engineering, Advanced Analytics

Champaign, IL
Dec 2024

University of Illinois Urbana-Champaign
Bachelor of Science in Computer Science + Chemistry, GPA: 3.5/4.0

Champaign, IL
May 2023

EXPERIENCE

Sinopec Group.
Software Engineer

Beijing, China
Jan 2022 – Aug 2022

- Developed a backend workflow engine from scratch using Spring Boot, enabling end-to-end processing of forms from initiation to ratification with features such as parallel and ordered countersignatures, automated nodes, and time-off management. Successfully deployed the engine across multiple projects, including Sinopec and Sany Heavy Industry.
- Contributed to an open-source Instant Messaging platform based on the WebSocket protocol, enhancing secure and efficient communication for China National Machinery Industry Corporation.
- Participated in the development of a Test Data Management system focused on IoT data collection using the Modbus protocol. Designed workflows for test applications and tasks, and performed data mining on test results, with a primary focus on implementing Weibull distribution analysis.

Qingchuangying Education Technology Co., Ltd.
Teaching Faculty

Beijing, China
Oct 2021-Jan 2022

- Developed and delivered comprehensive Python and Scratch programming modules, fostering students' coding skills and computational thinking.
- Assessed and monitored student progress by evaluating daily assignments, providing constructive feedback, and conducting periodic evaluations to ensure continuous improvement.
- Designed and implemented UI/UX interfaces to offer parents transparent access to class feedback, student performance metrics, and homework grades, enhancing parent engagement and satisfaction.

ACTIVITIES

Low-Code Development Platform
Developer

Remote
Feb 2022 – Oct 2022

- Developed a platform utilizing object-oriented technology and Domain-Driven Design (DDD) to build and manage data models across multiple domains, defining intricate relationships between them.
- Implemented relationship mappings using FreeMarker, enabling the generation of code in Java, C#, PHP, Python, SQL, and other languages, facilitating the compilation of executable application systems.
- Optimized the algorithm for building tree structures with HashMap by integrating distributed deployment and multi-threading, increasing data model association relationship generation efficiency by over tenfold.

Financial Report Analyzing LLM – JIA Finance Practicum

Champaign, IL
Jan 2024 – May 2024

- Designed and implemented algorithms to parse and preprocess financial documents (e.g., 10-K, 10-Q), enabling efficient indexing with platforms like LlamaIndex.
- Conducted comprehensive research on multiple state-of-the-art large language models (LLMs) and developed a question-and-answer database to quantitatively evaluate their performance.
- Fine-tuned large language models to specialize in financial report analysis, enhancing their accuracy and domain-specific effectiveness.

ADDITIONAL INFORMATION

Quant/Data Science: Stochastic Calculus, Optimization, Numerical Analysis, Time-Series Modeling, Derivative Pricing
Technical Skills: Java, C/C++, Python, SQL, R, CUDA, ML (PyTorch/TensorFlow/scikit-learn), NumPy/Pandas
Tools: Docker, Linux, Git, Spring Boot, Flask, FastAPI, Redis, PostgreSQL, MongoDB, Nginx, Maven, LaTeX, Jenkins