

Lireng (Simon) Zheng

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Experiences

Senior Software Engineer - Full Stack Developer

Jul. 2023 - Present

RTX Corporation

New York City, New York

- Designed automated system to process **200,000+** line items per budget file into **Oracle**, reducing project creation time of by **50%**, and generating over **\$6 million** in direct savings from audit risks, material forecasts, and headcounts
- Built **12+** features to **5+** applications that improve latency of **10K+** requests by **300ms** using **TypeScript, Spring, SQL**
- Implemented migration of services into **Snowflake, AWS**, and **Git**, supporting program requirements for big data size
- Rewritten and retired **5+** legacy applications effectively, resulting in over **\$1 million** savings on operational costs
- Led technical meetings with other teams and stakeholders to deliver MVP promptly through **Zoom, Teams**, and **Jira**

Software Engineer - Full Stack Web Developer

Nov. 2020 - Jun. 2023

Itlize Global

New York City, New York

- Designed, built, and tested a platform for businesses to develop online marketplace for building products
- Visualized and maintained platform by delivering features for personalizing profiles and user support using **TypeScript, Spring**, and **SQL**
- Migrated platform to the cloud using **AWS CDK, ECS, S3**, and **Lambda** to manage serverless technology
- Integrated **3+** payment **APIs** for secure processing and checkout of compact order types valuing over **\$2 million**

Projects

OtakuSpeak - Japanese Learning App

25 Hours

- Created a language learning app for anime fans to learn Japanese via clips using **Angular, Python** and **Flask**
- Implemented transcribing tool for audio clips using **Whisper AI** to provide translation, pronunciation and notes
- Built extensive library feature, enabling users to browse through over **80+** anime titles and access direct viewing links

Cracking the Stock Market - Guide To Success

20 Hours

- Designed **RAG** system leveraging **LlamaIndex, PyTorch** and **TruLens** to curate key fundamentals for stock trading
- Developed a **Python RAG** system using the sentence-window and auto-merging retrieval techniques to improve metrics in answer relevance, context relevance, and groundedness trained on over **40+** evaluation questions
- Implemented an interactive dashboard that displays resulting evaluation metrics using **Plotly, NumPy**, and **Pandas**

DistrictMe - React Web App

50 Hours

- Created a **RESTful React-Leaflet** mapping web app that performs gerrymandering and generates district plans
- Processed US Census States demographic data using the computational cluster **SeaWulf** and the **MCMC** algorithm in **Spring** to aggregate congressional districts into **10,000+** random districtings based on user set constraints
- Utilized **GeoPandas** and **Shapely** in **Python** to generate precinct nodes and edges that identify contiguous precincts

Activities

Technical Founder

Jan. 2024 - Present

Hungie

New York City, New York

AI NYC (Dev Community)

Ongoing

Online Networking Events/Organization Hackathons

New York City, New York

- Hosted **AI** workshop at **2+** hackathons by demoing **AI RAG** app and teaching attendees on building their own versions
- Engaged in online speaker info-sessions and Q&A events with the founder of **NexHealth**, **AppLovin**, and CPO of **Hinge**

Software Engineering Tutor

Oct. 2016 - Jan. 2020

Angel Advantage Center

New York City, New York

- Facilitated student learning through hands-on projects focusing on web development in **HTML, CSS**, and **JavaScript**

Technical Skills

Languages- **Proficient:** Java (7yr), SQL (5yr), TypeScript (5yr) | **Intermediate:** JavaScript (5yr), Python (3yr) | **Beginner:** C (2yr)

Software- AWS | Snowflake | Oracle | Spring | Node.js | React | Angular | JUnit | Mockito | Git | Jenkins | Jira | OpenAI | VSC

Education

Stony Brook University, Stony Brook, New York

Bachelor of Science in Computer Science

Relevant Coursework: *Software Engineering - Data Structures, Algorithms | Database Systems - RDBMS, Schema Designs*