Tianle Cheng

+1 6462698719 - tianlecheng112@gmail.com - https://www.linkedin.com/in/tianle-cheng-6147a4325

SUMMARY

Seeking a **Summer 2025 Software Engineering Internship**.

A Software Developer with a strong mission to drive technological revolution. Proficient in **Java, Python, Go, TypeScript**, and skilled in building scalable systems using **Docker** and **AWS**. A lifelong learner with deep curiosity, dedicated to delving into the core and details of challenges, proposing and implementing evolutionary solutions. Amateur boxer and Blues guitarist.

EDUCATION

New York University — **New York, USA**

Master of Science in Applied Urban Science and Informatics (GPA: 4.0/4.0) — *Sep 2024 - May 2026*

- *Core Courses: Applied Data Science, Machine Learning for Cities, Urban Computing and AI*

University of Science and Technology Beijing — **Beijing, China**

Bachelor of Engineering in Artificial Intelligence — *Aug 2019 - Jun 2023*

TECHNICAL SKILLS

Programming Languages: Python, Java, SQL, JavaScript, TypeScript, Go, HTML, CSS, C, R
Frameworks and Technologies: FastAPI, Spring Boot, Node.js, React, Redux, REST API, Docker, Kubernetes, CI/CD
Databases and Tools: MySQL, PostgreSQL, MongoDB, Redis, AWS (S3, EC2, Lambda, SageMaker), Git

PROFESSIONAL EXPERIENCE

C-STAR — *FastAPI, AWS, MySQL, React*

Software Engineering Intern, New York City, USA — *Oct 2024 – Present*

- Developed a web app using **FastAPI**, **React**, and **MySQL**, reducing manual processes in real estate by 95%.
- Used **AWS S3**, **EC2**, and **Lambda** to establish a data pipeline for automated batch ingestion and processing.
- Integrated **Amazon SageMaker** to predict sale prices, rental rates, and identify comparable listings.
- Utilized **MySQL** and **Google Sheets API** to store and sync real estate data dynamically in real time.
- Implemented rolling storage to delete older data, reducing Google Sheets storage usage by 90%.

PROJECTS

Full Stack E-Commerce App with SpringBoot & React — *Java, TypeScript, SpringBoot, React, Docker, MySQL, Redis*

- Designed and developed a full-stack e-commerce app from scratch using **Spring Boot**, **MySQL**, and **React**.
- Built a responsive frontend using **React**, **TypeScript**, **Redux**, and **Material-UI** for modern design.
- Included features such as product browsing, search, filtering, shopping cart, login, and checkout.
- Built **RESTful APIs** for frontend-backend communication and containerized the app with **Docker**.
- Used **Spring Data JPA** and **Hibernate** for data access, storing product, user, and order data in **MySQL**.
- Integrated **Spring Security** with **JWT** for secure user access and data protection.
- Leveraged **Redis** for caching shopping cart data, improving processing speed by 30%.

Full Stack Purchase and subscription Platform with in Go — *Go, GoHTML, PostgreSQL, MongoDB, Stripe API*

- Architected a distributed e-commerce platform with **Go**, **GoHTML**, and **PostgreSQL**.
- Implemented **Docker** containerization and **Kubernetes** orchestration for automated scaling and deployment.
- Developed authentication and payment systems using **JWT tokens** and **Stripe API** for secure user transactions.
- Built concurrent email service with **Goroutines** and **channels**, achieving 40% faster document processing.
- Designed **microservices** architecture using **gRPC** and **RabbitMQ** for scalable asynchronous communication.
- Optimized data structure with **PostgreSQL** for transactions and **MongoDB** for logs, boosting speed by 30%.

MLOps for Churn Prediction with AWS SageMaker — *AWS, Python, Docker, Git, CI/CD*

- Built a MLOps pipeline using **AWS SageMaker** and **EC2** for churn prediction with **XGBoost** and **Flask** backend.
- Implemented **ETL** automation with **AWS Glue** and **AWS Lambda**, processing data stored in **Amazon S3**.
- Built CI/CD with **GitHub**, **CodePipeline**, and **CloudFormation**, deploying models via **Docker** on **ECR**.
- Managed model lifecycle with **Model Registry**, **Step Functions**, monitored via **AUC** metrics.