

ZHIQI CHEN

EDUCATION

Georgia Institute of Technology

M.S. in Computer Science, GPA: 3.75/4.00

August 2020 - December 2021

Atlanta, GA

University of Michigan

B.S. in Computer Science & Engineering, GPA: 3.98/4.00

September 2018 - May 2020

Ann Arbor, MI

Shanghai Jiao Tong University

B.S. in Electrical & Computer Engineering, GPA: 3.94/4.00

September 2016 - August 2020

Shanghai, China

PROFESSIONAL EXPERIENCE

Staff Data Engineer

Visa Technology Operations LLC

February 2022 - Present

Atlanta, GA

- Lead treasury and reconciliation process for B2B cross-border transactions, ensuring accuracy and compliance
- Design and implement data-driven solutions for payment processing, file transfers, and banking integrations
- Develop end-to-end pipelines using Kafka, Spring Boot, and FastAPI to synchronize financial information
- Generate regulatory reports and client-facing analytics through SSRS and Java/Python applications
- Drive development efforts from conception to delivery, meeting strict SLAs for global payment systems

PROFESSIONAL PROJECTS

Platform Kafka Consumer

February 2025 - Present

- Develop a robust system to synchronize updates between new and legacy database tables
- Engineer efficient parsers for Kafka messages, converting them into structured entities for database storage

Treasury Bank Accounts Management

February 2025 - Present

- Implement comprehensive management system for all Currencycloud providers and accounts, including various account types such as safeguarding accounts
- Develop seeder functionality and REST API allowing updates to account information through YAML files or API calls
- Design solution to track and manage IBAN/account numbers and other transaction identifiers and information

Flash File Transfer

May 2024 - February 2025

- Architected global payment file delivery system meeting strict 15-minute SLA requirements
- Built Java application facilitating secure bidirectional payment file transfers with international banking servers

Network Analytic Insight

September 2022 - June 2024

- Designed and implemented Java Spring Boot application synchronizing MySQL processing database to MSSQL Data Warehouse via Kafka and Debezium connectors
- Ensured treasury data integrity throughout the synchronization process with robust validation mechanisms
- Created SQL Server Reporting Services (SSRS) reports to visualize and analyze network transaction data
- Automated generation of monthly Money Transmitter License Reports for US regulatory compliance

VBC Core Service

February 2022 - December 2024

- Developed Python/FastAPI application processing payment settlements and generating Swift files (MT940)
- Created Java Spring Boot application for processing bank statements to detail transactions and account balances (CAMT053)

RESEARCH EXPERIENCE

FSM Supervisory Control Implementation

September 2019 - December 2019

Research with Professor Stéphane Lafortune and Dr. Yiding Ji

Ann Arbor, MI

- Developed visualization system for finite-state machine transitions using Python and Webmachine Transition GUI API
- Implemented three algorithms: terminal state removal, supervisory control to a bipartite game transformation, and machine supervision under local mean payoff constraints

Cache Access & Data Locality Optimization

May 2019 - August 2019

Research with Professor Baris Kasikci and Dr. Tanvir Ahmed Khan

Ann Arbor, MI

- Optimized application performance by addressing poor data locality and inefficient cache access patterns
- Utilized Toplev and performance analysis tools to identify bottlenecks and pinpoint problematic source code
- Implemented built-in prefetching techniques for nested loops to reduce redundant data fetching
- Restructured large data structures to improve data locality and cache utilization
- Successfully applied optimizations on MySQL, MongoDB, Boost Graph Library and SPEC Benchmarks

TECHNICAL SKILLS

Programming Languages

Java, Python, C++, C, C#, JavaScript

Frameworks

Spring boot, FastAPI, React

Databases

MySQL, PostgreSQL, MongoDB, Microsoft SQL Server

Cloud & Tools

AWS, GCP, Kafka, Debezium, Docker, Git, Jenkins, IntelliJ, PyCharm