

# Qiwen (Stan) Chen

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## EDUCATION BACKGROUND

### University of Pennsylvania

*B.S.E in Computer and Information Science & M.S.E. in Robotics*

Philadelphia, PA

Expected May 2027

- **Cumulative GPA:** 3.84/4.0

- **Relevant Coursework:** Scalable and Cloud Computing (Node.js, Java), Software Development (Java), Data Structure and Algorithms (Java), Operating System (C), Interactive Computer Graphics (C++, GLSL), Computer Vision (Python)

## TECHNICAL SKILLS

**Languages:** Java, C, C++, C#, Python, JavaScript, TypeScript, SQL, HTML, CSS, Git, GLSL, Swift, OCaml

**Frameworks/Libraries:** Spring, Spring MVC, MyBatis, React.js, SwiftUI, Django, FastAPI, Flask

**Databases:** MySQL (AWS RDS), AWS DynamoDB, Redis (AWS ElastiCache), PostgreSQL, AWS S3

**DevOps/Cloud/Tooling:** Docker, Kubernetes, AWS (EC2, EMR, Security Group, Cloudwatch), Kafka, Jenkins, Maven

## PROFESSIONAL EXPERIENCES

### NextTier – Crypto Platform Reliability & CI/CD Automation Intern

May 2025 – Aug 2025

*Redis, Jenkins, GitHub, Maven, AWS EC2, JUnit*

- Scaled system throughput by implementing parallel processing across 100+ currencies and managing **Redis** distributed locks, cutting load time from 8 hours to 30 seconds.
- Strengthened platform reliability by applying unit and integration testing frameworks with **JUnit** while auditing code for vulnerabilities, increasing code coverage from 55% to 85%.
- Established a **CI/CD pipeline** integrating Maven builds, JUnit tests, GitHub source control, and automated deployment to **AWS EC2** via Jenkins, reducing deployment frequency from weekly to daily.

### Eth Tech - Software Engineering Intern, Market Data & Trading Systems

May 2024 – Aug 2024

*Java Spring Boot, MyBatis, AWS RDS (MySQL), Kafka, Multithreading*

- Engineered a real-time market data ingestion pipeline using **Java Spring** and **MyBatis**, fetching and storing tick data from Binance, Coinbase, and other providers into **AWS RDS**.
- Optimized ingestion performance using multithreading and batch inserts, building REST APIs for real-time portfolio management and backtesting.
- Implemented **Kafka**-based asynchronous queues to decouple service dependencies, improving system reliability and reducing downtime by 20%.

### UPenn Student Federal Credit Union – Chief Technology Officer (Prev. Information System)

Sep 2025 – Present

*AWS, Hyper-V, PowerShell, Active Directory, Cisco Meraki, MySQL, React*

- Architected hybrid **Hyper-V/AWS** infrastructure hosting the public React website and internal systems, utilizing PowerShell automation to ensure 99.9% uptime and NCUA compliance.
- Secured internal networks via Active Directory and **Cisco Meraki**, implementing automated vulnerability scanning to protect sensitive PII.

## SELECTED PROJECT

### PennBook | Node.js, Express, AWS DynamoDB, Apache Spark (Java/GraphX), AWS EMR, Docker

Nov 2025 – Dec 2025

- Architected a scalable social backend on AWS DynamoDB, utilizing concurrency limits, health checks, and batch operations to ensure high availability and reliability.
- Implemented a news recommendation system on AWS EMR using Apache Spark (Java) to execute Adsorption/distributed label-propagation algorithms on social graphs.

### PennOS | C, POSIX API, FAT Filesystem, Operating System

Apr 2025 – May 2025

- Engineered a POSIX FAT file system in **C**, utilizing memory-mapped I/O to simulate kernel-level block allocation.
- Ensured system stability through robust error handling, metadata tracking, and low-level resource management.

## ACTIVITIES AND INTEREST

**Leadership & Teamwork:** Teaching Assistant for Program for Algorithmic and Combinatorial Thinking (2024 & 2025)