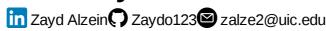# Zayd Alzein

in Zayd Alzein Zaydo123 zalze2@uic.edu

Education

University of Illinois at Chicago
Bachelor of Science in Computer Science
August 2023 - December 2026

Experience

Incoming Software Engineering Intern, Cboe *June 2025 - August 2025*
- Low latency quote generation and pricing team

Software Engineer, UIC Student Affairs Technology *November 2023 - Present*
- Established connections with the CTA and wrote automated ETL pipelines processing over *$2.4M* of subscriptions per quarter
- Rewrote the university locker management system, managing over *1,800* lockers and servicing over *5,000 students* per semester
- Ported legacy Node.js applications to ASP.NET and created CI/CD pipelines using Docker, GitHub Actions, and Azure publish profiles

Extracurricular Involvement

Developer, SIG Quantitative Trading (ACM) *December 2023 - Present*
- Developed RSS feed parsers for financial news to power sentiment analysis algorithms

Member, Google Developer Student Clubs (GDSC UIC) *October 2023 - Present*
- Attended technical workshops on Google technologies and software development practices

Projects

Ionic - IWS *December 2024 - Present*
Closed SRC
- Developed a managed payment gateway system up to *25.9M%* faster than ACH for international settlement
- Integrated with the Solana and Bitcoin blockchains to provide near-instant, low-cost transactions for international clients
- Utilized Apache Kafka for cross-service communication and created an versatile API for client integration
- Used AWS Keystore to securely handle master encryption keys for Heirarchical Deterministic Wallets

Solana Token Data Ingestor *April 2024*
- Engineered a high-throughput blockchain ingestor using Go and Python, optimized for millisecond transaction processing
- Implemented backoff algorithms to ensure uninterrupted interservice communication via Kafka topics and Redis Pub/Sub
- Created a client-facing API used to feed live and historical time series data to algorithmic trading programs
- Reduced database costs by up to 90% by optimizing database compression policies and utilizing Redis for caching

Poof Util *January 2024*
- Authored a web scraping library to reduce development time by abstracting fingerprint generation and proxy utilization
- Added support for all major proxy protocols, including SOCKS5 and HTTP/S for varying levels of desired anonymity
- Implemented continuous integration practices by automating builds and tests on GitHub

Physics Central *October 2021*
- Owner and principal developer of an online gaming web platform
- Employed CDNs, caching, and various cloud object storage providers to minimize the high costs of large game file transfers
- Received a peak of 14,000 daily active users and over 2.1M games played in its lifetime

UIC Course Analyzer *January 2024*
- Scripted a program to parse over a decade of college course data to find the best classes and professors to enroll with
- Generates visualizations with Matplotlib to help decide optimal enrollment times, most reliable professors, and visualize distributions

Skills

- **Languages:** C#, Java, C, C++, Python, SQL, Go, JavaScript, Typescript, HTML, CSS
- **Frameworks:** Node.js, ASP.NET, React, Express, EJS, SvelteKit, Vue.js, Blazor, Flask, FastAPI, Tailwind CSS, Bootstrap
- **Tools:** Git, Docker, Kubernetes, Kafka, Redis, AWS, Azure, SQL Server, PostgreSQL, MySQL, MongoDB, TimescaleDB, gRPC, Protobuf
- **Methodologies:** Agile, Scrum, Kanban, CI/CD, TDD, DDD, Microservices, REST, GraphQL, OAuth, JWT, WebSockets, OAuth, JWT, WebSockets
- **Miscellaneous:** System design, Cryptocurrency, Algorithmic trading, Web scraping, DevOps, Developer tooling