KATHIR MEYYAPPAN

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EDUCATION

University of Chicago - Mathematics + Computer Science; GPA: 3.94

September 2022 - May 2026

(Select) Relevant Coursework: Database Systems, Advanced Database Systems, Machine Learning, Adversarial Machine Learning, Operating Systems, Algorithms, Abstract Algebra, Real Analysis, Formal Languages, Speech Technologies (Graduate)

Leadership/Involvement: Algo Group (President), Japanese Animation Society (Vice President), ChiData (Researcher)

Awards: Robert Maynard Hutchins Scholar (top 10% GPA), Dean's List, 3x AIME Qualifier

EXPERIENCE

Arrowstreet Capital Boston, MA

Quantitative Developer Intern

June 2025 - August 2025

• Incoming, Summer 2025

ChiDataChicago, ILUndergraduate ResearcherOctober 2024 - Present

• Infrastructure-related work on relational database system CrocodileDB under Prof. Aaron Elmore @ UChicago.

- Implemented result caches and query subplan detection in Rust to reduce compute redundancy and boost query efficiency.
- Wrote end-to-end DB persistence mechanism (via shutdown-time serialization) for volatile state recovery upon reboot.

Amazon Palo Alto, CA

Software Development Engineer Intern

June 2024 - August 2024

- Increased DataZone's database performance, using bitmap algorithms to speed up numeric aggregation queries by over 20x.
- Implemented histogram generation feature, allowing for more granular client-side access to numerics in the database.
- Architected Entity Store inspection utilities, facilitating the use of REST-based database communication protocols.
- Created 7 critical API endpoints, enabling access to internal DynamoDB and S3 storage frameworks for sev forensics.

Institute of Politics Chicago, IL

Software Developer

October 2023 - January 2024

- Identified malicious false-citation practices in ~200 political flyers with University of Chicago Institute of Politics.
- Utilized LLM (Llama2) + regex to identify 1000+ misinformation sources and pipeline data into Google Drive workflow.

Dräger Andover, MA

Software Engineer Intern

June 2023 - September 2023

- Solved defect-tracking bottleneck in product lifecycle by automating issue reporting, reducing Jira traffic by 85%.
- Developed, documented, and deployed internal desktop application that streamlines quarterly FDA communication process.
- Wrote OpenXML scripts (C#) in backend to execute 2500+ JQL queries per day (in Jira database) to generate and file reports.

PROJECTS

mangalert.com - Manga Serialization Notification Service | JavaScript, Python, Google Cloud Platform, Firebase

- MangAlert notifies 50+ users per month (via email and website) of followed anime/manga serializations that have ended.
- Built REST API with Node (Express) and deployed + hosted site, scheduled database/email updates, etc. using GCP.
- Securely hosted user data and media info in Firebase and displayed profile data to users with a React + TypeScript frontend.

SKILLS

Programming Languages: Rust, Python, C, Go, JavaScript, C#, R, SQL

Tools/Tech: PyTorch, AWS, Google Cloud Platform, Node.js, Git, SVN, Jira, Firebase, OpenCV, Microsoft Visual Studio

Languages: English, Japanese, Tamil