

KATHIR MEYYAPPAN

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EDUCATION

University of Chicago - Computer Science + Mathematics ; GPA: 3.97

September 2022 - May 2026

Relevant Coursework: Systems Programming, Theory of Algorithms, Database Systems (Graduate), Abstract Linear Algebra, Real Analysis, Discrete Mathematics, Math Foundations for Machine Learning, Waves & Optics, Probability Theory

Leadership/Involvement: Algo Group, Japanese Animation Society (Acquisitions Officer), House Council (Secretary)

Awards: Dean's List 2022-2023, 3x AIME Qualifier

EXPERIENCE

Amazon Web Services (AWS)

Santa Clara, CA

Software Development Engineer Intern

June 2024 - August 2024

- Elastic Kubernetes Service

UChicago Institute of Politics

Chicago, IL

Software Developer

October 2023 - December 2023

- Worked in a small team to programmatically identify malicious false-citation practices in ~200 politically charged flyers.
- 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 bottleneck issue in product lifecycle by streamlining defect report auto-generation, decreasing manual hours by 85%.
- Developed, documented, and deployed internal tool (using C#), automating quarterly FDA communication process.
- Wrote OpenXML scripts in backend to execute 2500+ queries per day from Jira database to generate and file reports.

Valtitude

Woburn, MA

Intern

June 2021 - August 2021

- Utilized data science packages and ARIMA methods to predict trends in multi-faceted client data in the supply chain sphere.
- Documented utility of various time series processes in demand forecasting, using R to visualize and present findings.

PROJECTS

MangAlert.com - Manga Serialization Notification Service | JavaScript, Python, Node.js, Google Cloud Platform, Firebase

- MangAlert notifies 250+ 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.

Edge Detector with Directional Heatmap | Python, image processing, calculus, linear algebra, documentation

- Implemented original Canny edge detection feature using theta gradient, imposing edge orientation heatmap onto images.
- Also coded (from scratch) Gaussian + median blur, nearest neighbor + bilinear interpolation, greyscaling, box sampling, etc.

Unix Shell | C, Bash

- Fully functional Unix shell written from scratch in C, with support for all Unix commands as well as built-in functions.
- Implemented output redirection through concurrent programming and wrote robust testing scripts with Bash to test shell.

SKILLS

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

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

Languages: English, Japanese, Tamil