Anish Kambhampati

Fishers, Indiana

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Education

Purdue University

May 2026 (Expected)

M.S. in Computer Science

West Lafayette, Indiana

- Selected Coursework: Artificial Intelligence, Compilers, Database Systems, Networks, Randomized Algorithms
- Activities: Vice President @ Boiler Quant, Lead Frontend Developer @ Boilerexams, Violist @ Purdue Orchestras

Purdue University

May 2025

B.S. in Computer Science with Honors, Minor in Mathematics (3.99 GPA)

West Lafayette, Indiana

• Selected Coursework: Analysis of Algorithms, Numerical Methods, Probability, Real Analysis, Systems Programming

Experience

Akuna Capital

June 2025 - August 2025

Quantitative Development Intern

Chicago, IL

- Integrated magic-trace into Akuna's testing software for quoting and built a pipeline for version-to-version comparisons.
- Created a data ingestion system to process binary traces into Delta Tables using Databricks, PySpark, S3, and Perfetto.
- Built a model context protocol (MCP) server to access trace data in Databricks and source code with the Bitbucket API.
- Wrote an MCP client with LangChain, LangGraph, and Anthropic LLMs to detect and explain performance regressions.

Elevance Health

May 2024 - August 2024

Systems Analyst Intern

Indianapolis, Indiana

- Analyzed and documented 200+ Availity API and Datahub field mappings using PL/SQL scripts and Toad for Oracle.
- Collaborated with stakeholders to gather requirements and identify gaps in existing documentation on Confluence.
- Gained comprehensive knowledge of IT project methodology, claims processing, and FHPS business operations.

District 4 Labs

December 2023 - May 2024

Software Engineer Intern

- Developed feature-rich, data-driven components for the data breach catalog, using Nuxt, Tailwind, and PrimeVue.
- Integrated AWS Amplify authentication into the frontend using role-based access control and custom middleware.

First Internet Bank

June 2022 - July 2022

Intern

Fishers, Indiana

- Shadowed key departments across the bank, including HR, Retail Banking, Risk Management, and Internal Audit.
- Designed Excel spreadsheets to help track inventory, inform pricing strategy, and record audit information.

Projects

ML for CFD Simulations | OpenFOAM, ParaView, Python, SLURM

Februrary 2025 – May 2025

- Worked with two PhD students to investigate OOD ML predictive capabilities in computational fluid dynamics (CFD).
- Ran OpenFOAM simulations using SLURM scripts and made visualizations with ParaView, Matplotlib, and ffmpeg.
- Created TensorFlow records using ParaView and Python scripts for data post-processing and wrote a technical report.

s-ray | C++, CUDA, OptiX, Python, $Shell\ Scripting$

August 2024 - May 2025

- Worked with a PhD student to research how NVIDIA ray tracing architecture can speed up spatial database queries.
- Wrote a baseline CUDA point-in-polygon implementation, prepared datasets, and performed benchmarking tests.
- Showcased research findings through a technical report and a poster presentation at NCUR 2025 in Pittsburgh, PA.

Shield | discord.js, Docker, Dokku, Nextra, Postgres, Remix, Stripe, Turborepo, VPS

August 2023 – September 2024

- Developed a Discord server administration bot, with RBAC, rate limiting, bot whitelists, and premium subscriptions.
- Designed and deployed a monorepo architecture for the bot, dashboard, and docs, where it protects 13k+ users.

Crypto Arbitrage Trading (CAT) | ccxt, Matplotlib, NumPy, pandas, sklearn

February 2024 – April 2024

- Worked with a quantitative finance team to analyze latency across cryptocurrency exchanges, collect exchange rate data, optimize an arbitrage detection algorithm, and explore the accuracy of ML models in predicting future exchange rates.
- Researched exchanges for arbitrage potential, added multithreading support, and created a gradient boosting model.

Technical Skills

Languages: C++, CSS, Java, Javascript, HTML, LaTeX, MATLAB, Python, SQL, TypeScript

Frameworks & Tools: AWS, Azure, CUDA, Docker, GCP, Git, Linux, NumPy, pandas, React, sklearn, Tailwind, VPS Certifications: Akuna Capital Options 101/201, Google Data Analytics, GIAC Cloud Security Essentials (GCLD), GIAC Foundational Cybersecurity Technologies (GFACT), Microsoft Azure Fundamentals (AZ-900)

Honors & Awards: USACO Silver, National Merit Scholar, Best Fintech Hack (BoilerMake XI), 2024 Levels.fyi Hackathon First Place, 2025 Quant @ Illinois Trading Competition First Place, Outstanding Senior in Computer Science