

Hrishikesh Kalyanaraman

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EDUCATION

University of Illinois at Urbana-Champaign

Bachelor of Science in Computer Science

SKILLS

Programming Languages: Python, TypeScript, Shell

Frontend: React, Next.js, Tailwind CSS

Backend: Node.js, FastAPI, Flask, REST APIs

Infra and Tools: Linux, Docker, AWS, MongoDB, PostgreSQL

AI tooling: LangChain, FastMCP, Claude Code, Cursor, ComfyUI, Databricks

Certifications: AWS Certified Cloud Practitioner, AWS Certified AI Practitioner

WORK EXPERIENCE

Software Engineer, Eli Lilly and Company | *FastMCP, React, Figma, NextJS*

July 2025 – Present

- Prototyped company's first AI tooling for compliant front-end design (MCP server + AI registry) - now adopted as official internal tooling
- Accelerating enterprise migration of external facing sites (200K daily visits) to internal design library through AI-assisted code generation using MCP server and AI registry
- Launching voice mode to production on a 3,000+ user chatbot by implementing phonetic encoding on browser speech transcripts, improving ontology-level intent recognition by 60% and enabling hands-free usage
- Delivered ad-hoc dashboard reducing time to insight by 23% as sole developer, integrating Workday, and internal PostgreSQL data to surface statistics for non-technical stakeholders

Software Engineer Intern, Eli Lilly and Company | *AWS, PostgreSQL, FastAPI*

May 2024 – August 2024

- Reduced Global Serialization team's annual review workload by 80% through RAG chatbot that ingests systech and serialization documents from Veeva, Salesforce to generate impact assessments
- Improved system recall by 20% by refining evaluation criteria and usage patterns with stakeholders around RAG limitations

Strategy Lead, Illini Solar Car | *Algorithms, Library Development, Flask*

January 2022 – March 2024

- Integrated 3 new algorithms into strategy pipeline by refactoring physics algorithms into standalone python library
- Raised pylint scores by 57% implementing unit tests and linting workflows across codebase
- Managed project timelines, task assignment, and onboarding for 50 member team

Software Intern, Optivolt Labs | *OpenCV, Linux, multiprocessing*

June 2023 – August 2023

- Decreased testing costs by \$25,000 through automation of test lighting procedures using PySerial, DMX Controller
- Doubled testing efficiency through automated temperature measurements using IR camera, Pyudev, OpenCV
- Enhanced internal testing library by adding support for external tools (lighting setup, IR Cameras, electronic loads)

PROJECTS

OpenForm (Personal Project) | <https://youtu.be/Bep-Te5wavU>

May 2025 – August 2025

- Built infinite-canvas UI using NextJS + tldraw with style-transfer-based colorization from reference images

Sitafal (Startup) | <https://youtu.be/pzONbZZ7U4g>

October 2023 – October 2024

- Built AI design tool leveraging ComfyUI workflows, accelerating conceptual design workflows by 10x
- Scaled pilot program to six industrial design firms, and received \$2000 in grants (1517, pitch competitions)

ChatCAD (Personal Project) | <https://youtu.be/p2bCNjmQGYI>

August 2024 – November 2024

- Developed AI agent for text-to-CAD in Fusion 360 using Fusion360 API, CadQuery

RESEARCH

Research Intern, NCSA | <https://zenodo.org/records/7245853>

May 2022 – March 2023

- Built continuous integration pipelines and observability dashboards for the Einstein Toolkit (<https://github.com/EinsteinToolkit/tests>)
- Presented at Illinois Summer Research Symposium, and co-authoring paper on transferring observability framework to Self-Force 1D, generalizing approach for any physics simulation codebase