Graduation: 2027

Adhitya Thirumala

🗘 https://github.com/adhi-thirumala 🛅 linkedin.com/in/adhitya-thirumala 🗷 adhit2@illinois.edu 🥠 adhithirumala.com

EDUCATION

University of Illinois Urbana-Champaign

Major: Computer Science + Linguistics Fox Chapel Area High School

Relevant Coursework

Computer Science: CS 374: Algorithms and Models of Computation, CS 225: Introduction to Data Structures and Algorithms with C++, CS 233: Computer Architecture, CS 124/128: Introduction to Computer Science I and II

Mathematics and Statistics: Math 416H: Honors Abstract Linear Algebra, STAT 400: Statistics and Probability I, MATH 241: Multivariable Calculus, CS 173: Discrete Structures, MATH 314: Introduction to Higher Level Math

SKILLS

Languages: Python, Java, HTML, Bash, LATEX, SQL, Go, C, C++, Lua, Javascript, Typescript, CSS, Rust

Tools: Git/GitHub, Github Actions, Vim, Huggingface, Linux, Maven, Gradle, SQlite, Docker, PostgreSQL, Vercel, AWS, Oracle Cloud

Libraries: pandas, NumPy, Matplotlib, Tensorflow, pyTorch, Sci-Kit Learn, Swing (Java), Spring (Java), Next.JS, React, Flask, LangChain, LangGraph

EXPERIENCE

Machine Learning Intern | Digital Main

May 2025 - August 2025

- Built an asynchronous multi-agent research automation system in Python, orchestrating complex query decomposition and parallel web research using LangGraph and Gemini LLMs
- Implemented robust rate limiting, error handling, and automated source validation, integrating Tavily search and PDF extraction for high-quality information retrieval
- Automated generation of professional research briefs, including Markdown-to-PDF conversion, dynamic chart/table creation, and inline citation management
- Developed a modular, extensible architecture supporting deep-dive research, data visualization, and interactive command-line workflows

Treasurer | Association for Computing Machinery at Illinois

2025 - Present

- Managed over \$350k of funds and financial records for largest student organization at Illinois
- \bullet Migrated accounting and credit card platforms from BILL.com to Ramp to streamline reimbursements workflow and reporting while successfully obtaining a credit limit increase of 800%
- Served as liaison between organization and CS department staff at Illinois to coordinate usage of department-provisioned funds for ACM events and activities

Debate Coach | Freelance

2024 - Present

- Conducted 4-6 hours of research weekly for national circuit debate competitors from Whitney M. Young Magnet High School, Gunn Senior High School, Unionville High School, and Edison College Preparatory High School.
- Met to teach important debate skills and review past tournament performance twice a week
- Judged debates at tournaments for 20+ hours per month both in-person and online
- Coached six teams to first-time elimation round finishes and championed round robin invitational tournament at the University of Michigan

RESEARCH

Clickbait Classification (arXiv) | Python, Torch

Oct 2022 - May 2023

- Developed NLP models to classify and spoil clickbait using LLMs and other transformer-based models, submitted to SemEval 2023
- Mentored by Dr. Elisa Ferracane

Extractive QA in Hindi and Tamil (arXiv) | Python, Torch

Oct 2021 - May 2022

- Built QA models improving performance by 20% over baseline in Hindi and Tamil due to modified RoBERTa tokenizer
- Received Carnegie Science Award for research contributions in multilingual NLP
- Mentored by Dr. Elisa Ferracane

ACTIVITIES

Clubs: Association for Computing Machinery