

AKASH AYYADEVARA

aayyadevara02@gmail.com | +1(913) 275-4208 | <https://www.linkedin.com/in/akash-ayyadevara-53b605204/>

EDUCATION

University of Illinois at Urbana-Champaign (UIUC)

BS in Computer Science and Economics, Minor in Statistics, Data Science certified

May 2025

GPA: 3.73/4.0

Relevant Coursework: Algorithms & Models of Computing, Data Structures, Compilers, Computer Systems & Architecture, Applied Machine Learning, Game Theory, Distributed Systems, Cloud Computing, Database Systems, Natural Language Processing

EXPERIENCE

Magna International

Software Engineer Intern

Remote

Aug 2024 – Oct 2024

- Developed a data collection and retrieval microservice for an embedded camera application using Flask and AWS, streamlining the process of capturing and analyzing assembly line images.
- Created a subnet infrastructure using VMware, subnetting, and IP addressing to enable camera access via virtual machines, storing all ping responses on AWS for real-time monitoring and analysis.

Magna International

Machine Learning Intern

Troy, MI

Jun 2024 – Aug 2024

- Leveraged machine learning algorithms to analyze captured images in real-time, quickly identifying quality miscues and enhancing the production line's defect detection speed and accuracy.
- Engineered a strategic development model using neural networks trained on sales and production datasets, which accurately projected automotive industry trends and their impact on market capitalization, enhancing precision in strategic planning.

Finurja

Software Engineer Intern

Remote

May 2023 – Aug 2023

- Architected a financial chatbot agent leveraging OpenAI's API and prompt engineering to simulate personalized financial advising, capable of responding to real-time queries on investment strategies, budgeting, and market trends.
- Designed and implemented an agent interface using Python to dynamically route user intent to tailored prompts, enabling contextual conversation flow and adaptive financial recommendations, which was then deployed to a production-grade partner application serving over 20 banks.

CS124 (Intro. Java course)

Course Assistant

Champaign, IL

Jun 2022 – May 2024

- Created over 50+ tutorial videos and guided students through algorithmic problem-solving, improving student performance through personalized technical mentorship.
- Facilitated workshops to help students apply core computer science concepts, reinforcing long-term understanding and improving curriculum adoption.

PROJECTS

GuessDat (Trivia Web App)

Backend Developer

Champaign, IL

Mar 2025 – May 2025

- Built and deployed a RESTful backend with Node.js and Express to power the core game engine and API layer of a full-stack trivia platform featuring 4,000+ questions across sports, music, movies, and video games.
- Architected and managed a MySQL database hosted on GCP, optimizing schema design, indexing, and advanced SQL queries to support responsive leaderboards, session history, and user-submitted content.

Political Bias Detector

NLP Researcher

Champaign, IL

Jan 2025 – May 2025

- Built a sentence-level classifier to detect political bias in 60,000+ labeled news sentences using Python and modern NLP techniques including TF-IDF, sentiment analysis, and Named Entity Recognition.
- Fine-tuned transformer models (BERT, RoBERTa, DistilBERT) using Hugging Face to classify texts as left-leaning, right-leaning, or neutral, with performance evaluated using PCA visualizations, F1-scores, and precision-recall metrics.

ML Predictive Socio-Economic Trends Analysis

Data Scientist

Champaign, IL

Apr 2024 – May 2024

- Engineered a predictive model analyzing the interplay between S&P 500 trends, economic indicators, and crime rates using Python and machine learning techniques to contribute to an understanding of socio-economic patterns for decision-making.
- Applied advanced data science methods, including multiple regressions, cross-validation, and ridge regression, to predict outcomes with a high degree of accuracy.

SKILLS

- Languages : Python, C++, R, Java, C, Swift, JavaScript, HTML/CSS, OCaml, SQL, React
- Tools/Technologies : Git, Docker, AWS, Flask, Postman, MongoDB, Rest, TensorFlow, Azure, GCP, BERT