Aayush Agnihotri

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EDUCATION

Cornell University   Expected May 2026
Bachelor of Arts in Computer Science, Minor in Business | GPA: 3.99   Ithaca, New York
Relevant Coursework: CodePath Advanced TIP, Machine Learning, Analysis of Algorithms, Object-Oriented and Functional Programming, Data Structures, System Design, Computer Networks, Backend Development, Discrete Math

SKILLS

Programming Languages: Python, JavaScript, TypeScript, Java, C, C++, OCaml, SQL, HTML & CSS
Libraries & Frameworks: React, Express & Node.js, Flask, Spring Boot, Django, PyTorch, TensorFlow, Sklearn
DevOps & Cloud: AWS, Microsoft Azure, Google Cloud Platform, Docker, Jenkins
Databases & Tools: PostgreSQL, MongoDB, MySQL, GraphQL, Git, Postman, Unix

EXPERIENCE

Paramount   Jun 2024 - Aug 2024
Software Engineer Intern   New York City, New York
- Implemented a CNN in Python with TensorFlow to classify ephemeral text within media with 94% accuracy
- Utilized Spark and Jupyter Notebooks to analyze data and train machine learning models, reducing noise by 80%
- Deployed model with AWS Lambda and Jenkins to the AIML pipeline, processing 9,000+ hours of content yearly

Johnson & Johnson   May 2023 - Aug 2023
Software Engineer Intern   Skillman, New Jersey
- Developed a ChatGPT-like AI chatbot using React, LangChain, and Django with 10,000+ users, achieving annual savings of $20,000+ through process automation
- Applied NLP algorithms to create text-based vector embeddings, optimizing document similarity search by 70%
- Integrated Milvus vector database to store/retrieve embeddings alongside single sign-on through Microsoft Azure

Cornell Nexus   Sep 2022 - Dec 2023
Software Engineer   Ithaca, New York
- Spearheaded design and implementation of a full-stack GUI application in React and Node.js with Express, enabling transmission of robot state
- Coordinated with an 8-member team to build robot field visualization software in Python using Numpy
- Simulated traversal algorithms and finite-state machine paths to optimize robot navigation strategies

PROJECTS

Eatery | *Python, Django, PostgreSQL, AWS, Docker*   GitHub
- Contributed to a Cornell Dining app with 40,000+ downloads, used by 10,000+ students and faculty
- Optimized backend response times by 300% via route caching and refactored models to remove redundancies
- Implemented user authentication and authorization, allowing for personalized notifications and protected routes

MusicMaster | *JavaScript, Python, React, Flask, PostgreSQL*   GitHub
- Built a machine learning music recommendation engine with React and Flask, leveraging the Spotify REST API and a dataset of 2,000+ song audio features
- Created a kNN recommendation model employing cosine similarity with Pandas and Sklearn to recommend songs
- Developed OAuth 2.0 compliant user authentication and utilized PostgreSQL for storing favorited content records

All In | *Java, Spring Boot, MySQL, Docker, Digital Ocean*   GitHub
- Designed and developed a Cornell Athletics sports betting app, allowing users to place prop bets on athletes
- Created an event prediction algorithm based on statistical analysis of player data collected by a web scraper

LEADERSHIP EXPERIENCE

Cornell AppDev   Sep 2023 - Present
Backend Lead & Course Instructor   Ithaca, New York
- Lead all backend development for a team of 50+ students building apps with 12,000+ active users
- Collaborate with iOS, Android, Design, and Marketing teams in Agile development to create and maintain apps
- CS 1998 Course Instructor, teaching client-server architecture, database design, and DevOps to 100+ students