Aniket Tuli

Education

University of Wisconsin - Madison

May 2025

Bachelor of Science in Computer Science, Data Science

Relevant Coursework

Artificial Intelligence, Database Management, Programming Languages, Data Modeling, Machine Learning, Data Structures, Algorithms, Discrete Math, Applied Statistics, Software Security, Human-Computer Interaction.

Experience

Oshkosh Corp | Software Engineer Intern |

Sept 2024 - Dec 2024

- Developed an AI-driven supply chain insights app combining news articles with AI, accomplishing an 85% reduction in response time and achieving sub-3-second query latency.
- Optimized system performance using RAG architecture, embedding models, and a vector data store.
- Seamlessly integrated 3 AI models with a React Native frontend by developing REST API endpoints using Flask.

Midwest Label Supply | Software Developer Intern |

June 2024 - July 2024

- Designed a centralized platform for multiple vendors to enable efficient tracking of parcels and food using QR codes with user authentication and role-based access control.
- Designed a React frontend and Flask backend with SQLite/PostgreSQL, improving workflow efficiency and traceability by 40% across over 50 client applications.

Scale AI | Data and Software Engineer Intern |

June 2024 - Aug 2024

- Developed and maintained critical internal tools using both Java and Python, directly supporting and accelerating large-scale language model (LLM) training workflows.
- Enhanced code quality by conducting detailed peer reviews and writing comprehensive unit and integration tests to ensure the stability of existing operational tools.

School of Human Ecology – UW | Student Computer Specialist |

Sept 2022 - May 2025

- Managed IT support for over 500 devices and 100 users, improving system uptime by 15%.
- Ensured zero-trust secure access with MDM systems and implemented a Zammad ticketing system to accelerate support

Projects

Kitchen2Fork - GDSC CheeseHacks | Python

- Developed an AI-powered recipe generator with 30,000 recipes for retrofitting in refrigerators, allowing users to capture ingredients from a live camera feed.
- Built a user interface using PyQt6 and image capture using OpenCV, achieving 97% ingredient detection accuracy.

Distributed Weather Data Pipeline | Python

- Developed a scalable, real-time data ingestion system by creating a Kafka producer that streamed daily weather records from a MySQL database to a Kafka topic.
- Guaranteed data consistency and resilience by implementing fault-tolerant Kafka consumers, writing atomic Parquet files to HDFS with checkpointing for "exactly once" delivery.

MINIREL(DBMS) | C/C++

- Developed a single-user DBMS with a buffer manager and a Heapfile manager for optimized structured data storage.
- Reduced SQL query latency by 40% by designing a cost-based query execution engine.

Fashion Vision: Advanced Fashion Classification | Python

• Designed, implemented, and optimized a CNN to classify the MNIST dataset in Pytorch, achieving 93% accuracy.

Technical Skills

Programming and Frameworks: Python, Java, JavaScript, TypeScript, C/C++, React, Node.js, Flask, HTML, CSS Data, AI/ML & Cloud: AWS, Google Cloud, PyTorch, TensorFlow, SciKit-Learn, Docker, Spark, Kafka, Pandas, NumPy, RAG, gRPC, BigQuery, Dataform, PyArrow, OpenCV, MapReduce, Flax, Selenium

Databases & Tools: Git, MySQL, PostgreSQL, Cassandra, SQLite, CI/CD, Jira, Agile, Scrum, GitHub, APIs, PyQt6

Leadership & Volunteering

Indian Students Association | President |

May 2022 - May 2025

- Organised 20+ cultural events and charitable fundraisers for the largest student organization, engaging 800+ members across 10+ nationalities.
- Directed a 40-person executive board, streamlining operations and guaranteeing successful execution of 20 annual events

Microsoft TEALS | Volunteer |

Sept 2024 - May 2025

• Mentored diverse students on Python-based computer science fundamentals to promote tech careers.