Akshar Raikanti

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EDUCATION

Purdue University **West Lafayette, IN**
Bachelor of Science, Computer Science ***August* 2023 – December 2026**
***Bachelor of Science, Artificial Intelligence*:** **GPA: 3.58**
Relevant Courses: Analysis of Algorithms, Systems Programming, Data Structures and Algorithms, Computer Architecture, Discrete Math, Programming in C, Object Oriented Programming
Skills: Python, Java, C, C++, C#, SQL, R, Assembly (x86-64), JavaScript, Relational Databases, NoSQL Databases, Machine Learning, Artificial Intelligence, Computer Vision, Natural Language Processing

PROFESSIONAL EXPERIENCE

Kohl's – Kohls Technology **San Ramon, CA**
Software Engineer Intern June 2025 – August 2025

- Developed frontend features using Angular (TypeScript) and backend RESTful APIs with Spring Boot (Java), improving application responsiveness by 15% and reducing load times by 5%.
- Enhanced two products: MAP (Merchant Assortment Planning), streamlining vendor order management, and KOO (Kohl's Order Optimization), optimizing distribution logistics, achieving an estimated 20% improvement in delivery efficiency.
- Upgraded services to new KADO (Kohl's Auto DevOps) versions, accelerating CI/CD pipeline deployment speed by 10% through integration with GitLab CI and OpenShift.
- Collaborated in Agile teams, actively participating in sprint planning, daily stand-ups, Jira management, and pair programming to improve code quality.

Veygo Rentals – Car Rental Service **West Lafayette, IN**
Full Stack Developer **August 2024 – May 2025**

- Led the development and maintenance of the Veygo Rentals website using React, JavaScript, CSS, Bootstrap, and Tailwind, creating a responsive, user-friendly interface for Purdue University students. Implemented real-time inventory tracking, automated booking confirmations, and multi-tiered user access controls. Built a robust back-end with Node.js and Python, integrating Stripe API for secure payments, and utilized Firebase Authentication for user account management.

TransSIGHT – Data Consulting Firm **San Francisco, CA**
Data Engineering and Machine Learning Intern **June 2024 – August 2024**

- Developed an automated end-to-end data pipeline using Apache Airflow, achieving a 30% reduction in ETL processing time, and managed Docker environments, resulting in a 15% improvement in deployment efficiency.
- Built predictive machine learning models (Random Forest, XGBoost) using scikit-learn and PyTorch, increasing transit demand forecasting accuracy by 20%; leveraged AWS (S3, MWAA) for scalable processing, optimized complex SQL queries enhancing database performance by 10%, and created detailed visualizations for actionable insights.

BASF – Agricultural Chemical Solutions **West Lafayette, IN**
Machine Learning Research Intern **August 2023 – May 2024**

- Deliver a statistical approach to approximating competitive market share down at a more granular level. Then leverage such output to compute benchmarking analytics for quantifying the accessible market opportunity relative to our competitors.

PROJECTS

Simple C++ Shell Implementation **April 2025**

- Implemented a custom Unix-like shell in C++ utilizing Lex and Yacc for command parsing, featuring piping, I/O redirection, background execution, environment variable expansion, command and process substitution, wildcard matching (globbing), built-in commands (cd, setenv, printenv, source), advanced terminal line-editing capabilities (history navigation, autocomplete, keyboard shortcuts), and robust signal handling (SIGINT, SIGCHLD) with comprehensive job control and resource management.

Custom C Compiler to x86-64 Assembly Implementation **December 2024**

- Designed and implemented a full-stack compiler using Lex and Yacc for lexical analysis and parsing, performing precise register allocation, and translating source code into optimized x86-64 assembly; supported advanced features including array indexing, pointer arithmetic, dynamic local/global variable management, function calling conventions, control-flow structures (loops, conditionals, break/continue statements), robust error handling, and automated assembly output generation.

Pantry Tracker App **July 2024**

- Created with React and Next.js for real-time data tracking of pantry items. Used Vercel to deploy application. Implemented user authentication and authorization using Firebase Authentication to ensure secure access to each user's data. Implemented a camera system to link items with images and using computer vision tools (OpenCV) to automatically detect objects in images to add to the list of items.

AI Customer Support System **August 2024**

- Engineered a sophisticated AI-driven customer support system utilizing Llama 3.1, Groq AI, Next.js, and AWS, enabling automated, adaptive responses to a wide range of customer inquiries. The system integrates with multiple APIs to enhance functionality and dynamically adjusts to various prompts and inputs, effectively routing specific queries to appropriate services.