Dillon Khanna

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EDUCATION

Miami University - College of Engineering and Computing | Oxford, OH   **Graduated**: May 2024
B.S. Computer Science, Minor in Finance   **GPA:** 3.75/4.00
Honors: President's List Fall 2021, Fall 2022; Dean's List Spring 2022, Spring 2023; Redhawk Excellence Scholarship
Relevant Coursework: Data Structures & Algorithms, Systems, High Performance Computing, Machine Learning, Databases

TECHNICAL SKILLS

Languages and Frameworks: Python, Java, C++, C#, SQL, JavaScript, Node.js, React, FastAPI, HTML/CSS, Autogen
Cloud & Tools: Azure (Functions, Cognitive Search, OpenAI), GCP (Cloud Run, Functions, Pub/Sub, BigQuery, Firebase Auth, Firestore, GCS), Databricks, Terraform, Docker, GitHub, PowerBI, Tableau, PostgreSQL (pgvector)
AI & ML: LLMs, Embeddings, Vector Search, Prompt Engineering, RAG Pipelines, Semantic Search
DevOps & Deployment: Serverless Architecture, CI/CD (GitHub Actions), Infrastructure as Code, Logging & Monitoring
Core Concepts: Data Engineering, ETL Pipelines, Agentic Workflows, API Integration, Multithreading, Object-Oriented Programming, Agile, Integration Testing, Data Structures and Algorithms

WORK EXPERIENCE

Perficient | Chicago, IL| Associate Technical Consultant   January 2025 – Present
- Co-engineered a proof-of-concept AI agent using Autogen and Azure OpenAI to map internal healthcare data to FHIR HL7 standards, achieving fully accurate results on ~30% of mappings and significantly reducing manual effort
- Owned agent logic and architecture, deploying via Azure Functions with real-time response and robust error handling
- Built a vector search system with Azure Cognitive Search to match internal column metadata to FHIR fields semantically
- Developed C# ETL tools for migrating 5M+ OpenText documents to SharePoint Online via secure batch workflows
- Designed migration logic with throttling, retries, and platform-specific constraints for fault-tolerant ingestion
- Earned Databricks Data Analyst/Data Engineer and Scrum@Scale Practitioner certifications

Miami University Department of Information Systems and Analytics | Oxford, OH | Teaching Assistant   August 2023 – May 2024
- Evaluated Tableau and PowerBI dashboards in a BI course, providing technical feedback on DAX and data modeling
- Maintained rubrics and solutions, collaborating with faculty to ensure content accuracy and grading consistency

Siemens | Chicago, IL |Software Engineer Intern   June 2023 – December 2023
- Built automated C# tests to validate round-trip transformation of controller config data between legacy and new schema
- Simulated real-world controller migrations using mock data, verifying fidelity and finding logic errors in XML mappings
- Owned testing infrastructure for a field-facing migration tool, enabling faster hardware upgrades by Siemens technicians

PROJECTS

LLM Powered Trading Agent (In-Progress)
- Developing a Gemini-powered RAG system to generate trade decisions from real-time article embeddings
- Built a modular Pub/Sub ingestion pipeline for financial news using the Tiingo API and Zyte scraping services
- Integrating the Alpaca API with rule-based risk filters using confidence thresholds and stock momentum indicators

AI Powered Document Management and Search Platform
- Designed an event-driven pipeline on GCP to extract text, chunk content, and generate embeddings from uploaded files
- Enabled document retrieval via semantic vector search using pgvector in a Neon-hosted PostgreSQL database
- Built a polished Next.js frontend with Firebase Auth and Firestore to manage user access and data isolation

Personalized News Aggregator App
- Developed a Flutter-based mobile app with a swipeable news feed and tabbed navigation to mimic social media UX
- Created a personalized content engine that updates user interest vectors based on article engagement patterns
- Engineered a deduplication pipeline that clusters similar articles into unified news "stories" using cosine similarity

LEADERSHIP AND INVOLVEMENT

Delta Sigma Phi – Iota Zeta| Oxford, OH| Treasurer   December 2021– January 2023
- Oversaw budgeting and financial operations for a $500K chapter, using Excel for forecasting and quarterly reporting
- Collaborated with executive board to plan events and ensure fiscal responsibility for 120+ active members