

# Jonathan Abele

jonathanabele17@gmail.com | (248) 766-9841

## EXPERIENCE

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### FactSet

Software Engineer I  
Software Engineer II

Boston, MA  
March 2025 - March 2026  
April 2026 - Present

- Improved and optimized a high-throughput **NLP data pipeline** processing **hundreds of thousands of articles daily**, supporting company tagging, ESG classification, and sentiment analysis
- Leveraged **RabbitMQ and AWS services (EC2, Lambda, DocumentDB)** to support scalable, event-driven data processing across multiple pipeline stages
- Enhanced an internal web platform used by content curators to review and classify articles, adding dashboards and **data visualizations** to improve visibility into ingestion trends and curator performance
- Conducted large-scale data analysis using **Databricks** to evaluate pipeline performance, identify data quality issues, and uncover inefficiencies in article processing workflows

### LLM-based Subtopic Autocuration Project

- Led end-to-end development of an **AI-driven validation system** serving as the final stage in a large-scale production pipeline, improving data quality and system reliability
- Designed a dynamic **prompt-driven classification system** (topic definitions, keywords, examples) with a three-state decision framework (approve, exclude, unsure)
- Deployed to production via API, processing **~20,000 articles/day** and significantly reducing manual curation workload while improving pipeline precision
- Built a secondary association autocuration system to validate relationships between tagged companies and subtopics, further improving data quality

### Data Solutions Intern

May - August 2024

- Built an **AI-powered chatbot** that interprets user queries, retrieves relevant information from large document sets, and generates accurate responses
- Developed a Flask-based backend API and a dynamic frontend using Vue.js
- Implemented a **RAG architecture** integrating OpenAI models with a Databricks vector database for semantic retrieval

### PantryAI

Personal Project

March 2026 - Present

- Built a full-stack application (SwiftUI + FastAPI) for tracking nutrition, managing pantry inventory, and logging meals
- Designed a **receipt ingestion pipeline** using OCR and LLMs to extract structured grocery data from images
- Implemented **RAG-based search and chat system** for nutrition queries and food logging workflows
- Developed scalable backend services with caching, data normalization, and structured APIs, enabling rapid feature iteration and real-time user interactions

## EDUCATION

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### University of Michigan

Bachelor of Science in Engineering in Computer Science and Minor in Mathematics

Ann Arbor, MI  
December 2024

Summa Cum Laude  
GPA: 3.8 / 4.0

## SKILLS

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Languages: Python, C++, C, JavaScript, SQL  
Frameworks & Tools: Flask, Vue.js, FastAPI, Git  
AI / Data: LLMs, RAG, Prompt Engineering, NLP, Vector Databases  
Infrastructure: AWS, Databricks, Terraform  
Databases: MongoDB, PostgreSQL  
Developer Tools: Claude, VS Code, MacOS, Windows