Jiaxiong (Jason) Guan

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Summary

Passionate and curious data enthusiast equipped with a year of professional experience in data and building end-to-end applications using Computer Vision, AI Agents, RAG, and NLP. Driven by a love for experimentation and learning.

EDUCATION

Georgia Institute of Technology

Incoming Feb 2026 - Estimated Dec 2027

M.S. - Analytics

Hunter College, City University of New York

Aug 2022 - Dec 2025

B.A. - Computer Science, Focus in Human Biology — **GPA**: 3.46

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, Java, SQL

Libraries: TensorFlow, PyTorch, Pandas, Scikit-Learn, Selenium, Seaborn, Flask, React, Next.js, NLTK

Tools: Git, WordPress, Tableau, Jupyter Notebook, BigQuery, AWS, Hugging Face, Docker, PySpark, Hadoop

Databases: PostgreSQL, MongoDB, Neo4j, Supabase, Amazon S3

EXPERIENCE

Data Science Intern

Jun 2025 – Aug 2025

Memorial Sloan Kettering Cancer Center

- Oversaw complete development cycle of **BERT**-based model to extract clinical entities from documents, ensuring HIPAA compliance and achieving **95**% F1-score and outperforming an industry-ready benchmark model of 91%
- Designed Natural Language Processing (NLP) and LLM data pipeline with SpaCy and Bedrock Claude, processing over 10,000 documents to create a 22% more accurate dataset for model fine-tuning
- Conducted comparative analysis of various open source models, including Bi-LSTMs and CRFs for NLP tasks and image segmentation and classification models for pathology scans to benchmark performance for future initiatives

Data Science Fellow Jul 2024 – Jun 2025

CUNY Tech Prep

- Built recipe recommender system, leveraging K-Nearest Neighbors and Approximate Nearest Neighbors algorithms to search and match within FAISS vector database based on user-inputted description and ingredients
- Cleaned dataset of over 500,000 recipes pulled from Food.com through NLP techniques, such as **tokenization** and **lemmatization**, standardizing the data for cosine similarity matches and increasing database lookup speeds
- Engineered full-stack computer vision AI workout tracker, utilizing **TensorFlow** and **MediaPipe** model to detect repetitions and a **ChatGPT**-based coach to provide real-time feedback on workout form

Technical Operations Intern

May 2024 – Aug 2024

The Bee Conservancy

- Automated SQL database updates with Python ETL pipeline, increasing efficiency and reducing manual workload
- Directed detailed analysis of search & user behavior data from HotJar and Google Analytics, and implemented a data-driven digital marketing plan resulting in 20% increased site traffic
- Launched survey application with React Native and SQLite to collect event attendee feedback and sentiment

Projects

The Lounge - MSKCC Hackathon 1st Place | Claude, AWS, LangChain

Aug 2025

- Developed an AWS-based Agentic AI social media app with an efficient RAG retrieval pipeline using OpenSearch, Amazon S3, and AWS Lambda to create a scalable and secure solution for young adults
- Features two key agents through **Bedrock Claude**, directing users to requested resources and helping schedule appointments along with an SMS confirmation through **Pinpoint**
- Leveraged SageMaker to build AI guardrails, redacting sensitive information and evaluating RAG responses

EZ-RX-ID | PyTorch, LangChain, Embeddings, Computer Vision, Supabase, REST API

Feb 2025 - Jun 2025

- Full stack AI application that identifies prescription pills from images and generates medical summaries from queries using an **Agentic Retrieval-Augmented Generation** (**RAG**) System with **DeepSeek**
- Designed modular **ETL** pipelines to preprocess pill images and metadata for ML training and structured storage in **Supabase** to support scalable querying and downstream applications
- Trained multiple ResNet-18 models to extract pill attributes (shape, color, imprint) and combined their outputs
 using an XGBoost classifier, resulting in a top-5 accuracy of 93%