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
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%**