

Animish Jain

732-668-0300 | aj655@cornell.edu | linkedin.com/in/animishjain | github.com/AniJ15

EDUCATION

Cornell University, College of Engineering

Ithaca, NY

Bachelor of Science in Computer Science

Aug 2024 – May 2028

Master of Engineering in Computer Science (3+1 Program)

Relevant Coursework: Object Oriented Programming and Data Structures, Introduction to Machine Learning, Computer Vision, Discrete Structures, Engineering Data Science, Data Structures and Functional Programming

EXPERIENCE

Incoming Machine Learning Engineering Intern, GEICO

Jun 2026 – Aug 2026

Machine Learning Engineering Intern, Anote

May 2025 – Aug 2025

- Benchmarked zero-shot object-detection pipelines using YOLOv8, DINO, and Faster R-CNN, implementing workflows in Python with PyTorch and Ultralytics to compare mAP, IoU, and other ML metrics across models
- Designed and deployed a smart orchestrator reasoning system using Python, Docker, and Ollama; engineered multi-agent workflows with LangChain and custom routing logic, reducing LLM inference latency by ~25%
- Integrated MCP into LLM pipeline using Python, FastAPI, JSON Schema, and LangChain, expanding agent tool interoperability by 40% and enabling tool-augmented reasoning across internal and external system endpoints

Software Engineering Intern, Pfizer Inc.

Sep 2023 – Feb 2024

- Queried over 50,000 internal license-request records using Splunk and SQL for downstream model training
- Developed a multimodal language sentiment analysis algorithm in Python using TensorFlow and scikit-learn with 5 individual machine learning models to evaluate the justification behind license and permission requests
- Applied optimization techniques including L1/L2 penalties, dropout regularization, and learning rate scheduling to improve model performance, achieving 97.6% accuracy for automated request approvals and denials

PROJECTS

Equity Options Volatility & Risk Engine | *Python, NumPy, Pandas, SciPy*

Apr 2026

- Built a vectorized SPY options pricing engine for cross-model comparative analysis implementing Black-Scholes, Binomial Tree, and Heston models, evaluated on 6.6M real contracts across 757 trading sessions from 2019–2021
- Conducted a large-scale out-of-sample implied volatility surface study with liquidity filtering on 548K+ SPY options; Found that binomial tree achieved best model with 44.8% of predictions within $\pm 10\%$ of observed prices
- Analyzed model robustness under calm vs. high volatility regimes (March 2020), finding Black-Scholes and binomial accuracy improved by ~15–17% under high volatility while Heston declined ~2%

GreenTab | *Python, JavaScript, Firebase, Chrome APIs, Supabase*

Nov 2025

- Built a full-stack sustainability analytics Chrome extension using JavaScript, Manifest V3, and Chrome APIs to monitor real-time browsing activity and estimate the environmental impact of spending time on the internet
- Integrated backend APIs to calculate CO₂, energy, and water waste metrics via precise calculation models
- Implemented user authentication using Google OAuth and persistent data storage with Supabase (PostgreSQL + SQL queries) to manage user profiles and browsing-impact telemetry to create personalized dashboards for users

Skin Cancer Classification App | *Python, TensorFlow, Scikit-Learn, OpenCV, SwiftUI*

Sep 2024 – Jan 2025

- Evaluated multiple machine learning pipelines in Python using TensorFlow, Scikit-Learn, and OpenCV, comparing metrics across CNN, KNN, Logistic Regression, Linear Regression, and SVM models for skin cancer classification
- Developed a multiplicative-weights update ensemble algorithm to optimally combine predictions from heterogeneous classifiers, improving overall accuracy, precision, and robustness against model-specific bias by over 10%
- Built and deployed an iOS application using SwiftUI, integrating the trained ensemble model pipeline to allow real-time inference on mobile devices with a clean and accessible UI supporting seamless on-device classification

TECHNICAL SKILLS

Skills/Frameworks: Python, Java, Keras, Pandas, Numpy, Tensorflow, Scikit-Learn, Linux, JavaScript, SQL, OCaml

Hobbies/Interests: New York Giants, Poker, DJ Mixing, Electric and Acoustic Guitar, Bhangra Dance, Travel