

# Krish Gandhi

U.S Citizen | 224-334-4525 | [kjg2352@gmail.com](mailto:kjg2352@gmail.com) | [linkedin.com/in/krish-gandhi12](https://linkedin.com/in/krish-gandhi12) | [krish-gandhi.github.io](https://krish-gandhi.github.io)

## EDUCATION

### University of Illinois Urbana-Champaign

May 2026

B.S. in Computer Engineering, B.S. in Statistics

Urbana, IL

Minor in Computer Science, Minor in Business

Activities: Quant at Illinois, Financial Engineering Club

## EXPERIENCE

### Pharmacy Associates

Jan. 2024 – Present

Founding Software Engineer

Chicago, IL

- Designed and built cloud infrastructure for data warehousing and CI/CD pipelines with Snowflake and AWS services (S3, Glue, Lambda, Step Functions, IAM) to automatically load and store 1,500,000+ records monthly.
- Created a CI/CD pipeline to automate deployment of AWS Lambda and AWS Glue functions using GitHub Actions
- Deployed machine learning solutions using AWS (Textract) to perform ETL tasks on 50,000+ records monthly.

### Optum

Jun. 2024 – Aug. 2024

Software Engineering Intern

Basking Ridge, NJ

- Created a CI/CD pipeline to automate unit testing of 250+ critical components with Apache Kafka, GitHub Actions, AWS S3 and Java to increase system security and save \$300,000+ in resources and 2,600 man hours annually.
- Built a full-stack web app using Flask to automate network analysis, speeding up process by 81%.
- Developed a script to determine 185 relevant GitHub repos out of 30,000 and parse from the configuration files.

### Yu Research Lab | University of Illinois Urbana-Champaign

Jan. 2024 – May 2024

Software Engineering Intern

Urbana, IL

- Produced initial states and simulated Markov models with NumPy, pandas and SciPy libraries to find models which yielded distributions similar to real statistics for patients with Major Depressive Disorder or Bipolar disorder.
- Visualized changes in Markov model states over simulated time by integrating Matplotlib and Seaborn libraries.

### Collins Aerospace

May 2023 – Jan. 2024

Electrical Engineering Co-op

Rockford, IL

- Designed and optimized models of complex systems in MATLAB and Simulink to simulate and visualize generator behaviors based on generator properties and environment conditions, speeding up computing time by 97%.
- Automated data extraction and analysis processes by building internal web scraping and ETL tools with Selenium, NumPy and Pandas libraries, increasing data accuracy and reducing manual processing time by 92%.
- Led cross-functional team efforts on design, development and execution of electrical test equipment and procedures for cutting-edge 3-Phase and 6-Phase standstill frequency response testing, which is now used by a team full-time.

## PROJECTS

### Order Matching Engine | C++, Python, MongoDB Atlas, Oracle Cloud Infrastructure | [Link](#)

- Implemented an order matching engine in C++ with support for market, limit, stop, stop-limit and FOK orders.
- Configured cloud infrastructure to handle real-time event processing, allowing users to interact on the same engine.

### AI Translator and Summarizer | Python, Hugging Face, Google Cloud Platform | [Link](#)

- Developed an AI-driven text translator using Facebook's mBART LLM enabling multilingual text processing.
- Deployed Google's Gemma 2 LLM on GCP's Vertex AI and set up an API endpoint to deliver real time summaries.

## TECHNICAL SKILLS

**Languages:** Python, C++, C, Java, JavaScript, React, SystemVerilog, R, RISC-V Assembly, Bash, MATLAB

**ML/AI:** PyTorch, scikit-learn, OpenCV, HuggingFace

**Databases/Database Management:** Snowflake, MongoDB, SQL, SQLite, SnowSQL

**Cloud Computing:** AWS, GCP, Oracle Cloud Infrastructure

**DevOps:** Jenkins, Docker, Git, GitHub, GitHub Actions, SSH, Apache Kafka

**Coursework:** Applied Machine Learning, Computer Systems Engineering, Data Structures, Signal Processing, Statistics and Probability, Statistical Modeling, High Frequency Trading, Financial Engineering