

Maxim Kleyer

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PROFESSIONAL SUMMARY

Generative AI engineer with a Computer Science & Mathematics degree (Macaulay Honors, 3.7 GPA) and professional RAG experience: built a LlamaIndex pipeline that grounds LLM output in retrieved source material for consistent free-text scoring. Pairs LLM application work with the delivery muscle modern AI teams need - Jenkins CI/CD, automated quality gates, monitoring - and an evaluation-first habit: built and walk-forward validated a LightGBM projection system over 7,401 games with calibrated probabilities, landing within a point of Vegas closing lines. Targeting Generative AI and MLOps engineering roles.

TECHNICAL SKILLS

Generative AI & LLM: Retrieval-augmented generation (RAG), LlamaIndex, retrieval grounding, prompt engineering, context design, structured outputs, LLM application development, natural language processing, AI-assisted development (Claude Code)

Machine Learning: Python, LightGBM, scikit-learn, PyTorch, ridge regression, isotonic calibration, Monte Carlo simulation, model evaluation, walk-forward validation, drift measurement, error analysis, pandas, NumPy

CI/CD & Model Delivery: Jenkins, GitHub Actions, Git/GitHub, CI/CD pipeline design, automated testing and quality gates (Selenium, Cucumber), release management, monitoring and log analysis, runbook documentation

Data & Engineering: Python data pipelines, REST API ingestion with caching (Parquet), data validation and reconciliation, SQL, JSON, Linux CLI

Cloud & Frontend: AWS, Microsoft Azure, React, Vite, Agile/SDLC

PROFESSIONAL EXPERIENCE

Technical Support Consultant

C&P Management | New York, NY | Mar 2025 - Present

- Diagnose and resolve application and network failures across 1,000+ FDNY workstations by analyzing application logs and live system state in real time.
- Serve as primary contact during incidents, translating technical root causes into clear updates for non-technical stakeholders.

DevOps Engineer & QA Automation

NuArch | New York, NY | Feb 2024 - Jan 2025

- Designed and maintained CI/CD pipelines in Jenkins and Git, automating build, test, and deployment across dev, QA, test, and UAT environments.
- Built automated test suites in Selenium and Cucumber gating releases on unit, integration, and regression checks.

AI Development Intern

SpruceTech | Clifton, NJ | Jun 2023 - Aug 2023

- Built a retrieval-augmented generation pipeline in Python with LlamaIndex, grounding LLM output in source material to score free-text answers consistently behind a user-facing UI.

PROJECTS

College Football Projection System | Python, LightGBM, pandas

- Built an end-to-end ML system projecting every FBS game weekly: 17-endpoint REST API ingestion into a Parquet cache, a ridge rating layer with preseason priors, and LightGBM models validated walk-forward over 7,401 games (2017-2025), training only on prior seasons.
- Reached 75.5% straight-up accuracy with kernel-smoothed, isotonic-calibrated win probabilities (Brier 0.162, calibration within noise), within a point of Vegas closing lines and well ahead of SP+ and always-pick-home baselines.
- Engineered the evaluation infrastructure around it: a fixed-fold experiment lab with a beat-baseline-on-both-folds acceptance rule, weekly grading that measures drift against backtest baselines, a 10,000-run Monte Carlo season simulator, and an automated test suite.

NFL Game Projection Model | Python, pandas, NumPy

- Built a bottom-up projection model and walk-forward evaluation harness over 816 games, reaching 63.8% straight-up accuracy and using error analysis to calibrate systematic bias to approximately 0.

RGB Heart Rate Monitor, Undergraduate Thesis | Python

- Measured heart rate from live camera input by isolating the heartbeat signal from RGB channel variation using Fast Fourier Transform and noise-reduction filtering; carried solo from problem definition through thesis defense.

EDUCATION

B.A., Computer Science & Mathematics

Macaulay Honors College at CUNY | New York, NY | May 2024 | GPA: 3.7

CERTIFICATIONS

Generative AI Fundamentals, Databricks Academy (2025) | Applied Generative AI Specialization, Simplilearn / Microsoft Azure AI (in progress)