Isaac Aurelio Felix

New York, NY • www.linkedin.com/in/isaacfelix • isaacfelix0987@outlook.com

Education

Georgia Institute of Technology

- **Master of Science in Computer Science** Jan 2025 – Dec 2026

University of Illinois at Chicago

- **Bachelor of Science in Computer Science & Linguistics** Jan 2022 – Dec 2023

Experience

Bank of America – Quantitative Analyst Feb 2024 - Present

Financial Crime Detection Models

- Engineered the fine-tuning data strategy to align external models with bank risk frameworks; curated the ground-truth corpus by standardizing historical fraud records, ensuring the vendor's detection logic matched internal protocols.
- Led the technical integration of a proprietary third-party AI platform, managing vendor due diligence and establishing precision/recall acceptance gates for production deployment.

Consumer Portfolio Strategy & Analytics

- Engineered the daily bankruptcy ETL workflow using SAS and SQL, processing high-volume daily records to generate real-time "beat/miss" forecasting signals for executive leadership.
- Modeled credit degradation curves via cohort analysis to challenge existing reserve assumptions; findings influenced a material strategic adjustment in portfolio risk management.
- Validated challenger models by conducting stress-tests and interpretability analysis, translating black-box outputs into actionable risk memos for non-technical stakeholders.

Georgia Institute of Technology – Research Assistant (Mussmann Lab) Aug 2025 – Present

- Partnered with the City of Charleston to evaluate the viability of expanding the city's sensor network by engineering geospatial features to model train crossing delay predictability within Charleston's complex port topography, establishing performance benchmarks that new hardware must exceed to ensure ROI.

Paragon Policy – AI Policy Fellow Sep 2025 – Dec 2025

- Consulted the NYC Dept. of Education (the largest US school district) to architect the technical procurement framework for AI adoption across 1,500+ schools.
- Defined district-wide security guardrails and data privacy standards, establishing the equitable implementation plans for vendor software.

Georgia Institute of Technology – Research Assistant (Friendly Cities Lab) May 2025 – Jul 2025

- Created the codebook and data schema to structure processed datasets; engineered Python ETL pipelines (Geopandas/QGIS) to normalize geospatial data in preparation for legislative congruence analysis.
- Contributed to the draft research manuscript by conducting a comprehensive literature review on legislative congruence.

Bank of America – Quantitative Analyst Intern Jun 2023 – Aug 2023

- Trained a multiclass LSTM network using Apache Spark to predict mortgage delinquency; performed feature selection to optimize validation accuracy.
- Preprocessed raw loan-level data to correct irregularities and outlier biases, optimizing data integrity for downstream risk modeling.

Learning + Interest + Technology Lab – Research Assistant Aug 2022 – Dec 2023

- Engineered the API integration for a robotic AI tutor; designed and optimized system prompts to map GPT-4 outputs to prompts engineered through interdisciplinary collaboration ensuring pedagogical alignment.
- Iterated on product features based on field tests with educators, directly translating qualitative user feedback into technical engineering specifications.

Nokia – Mobile Networks Co-op Sep 2022 – Dec 2022

- Collaborated with engineering teams to optimize radio-control software for 5G cellular radios, ensuring stability within high-throughput network environments.

Leadership Experience

Society of Hispanic Professional Engineers – Mentor Aug 2023 – Dec 2023

- Mentored junior engineering students on academic planning and career development in tech.

Research and Publications

M. A. Rahman, **I. A. Felix**, U. Shahid, and J. E. Michaelis, "PATHWiSE: An AI-Assisted Teacher Authoring Tool for Creating Custom Robot-Assisted Learning Activities", *Companion of the 2024 ACM/IEEE International Conference on Human-Robot Interaction (HRI '24)*, pp. 88–90, March 2024. DOI: 10.1145/3610978.3641086