

EDWARD BAKER

MACHINE LEARNING ENGINEER | SOFTWARE ENGINEER | DATA SCIENTIST

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Production-focused engineer building machine learning models, cloud pipelines, APIs, and reusable Python systems.

TECHNICAL SKILLS

Languages: Python, SQL, Java, C/C++, JavaScript, R

ML & Data: Scikit-learn, Azure Machine Learning, Snowflake, Streamlit

Cloud & Engineering: Azure, AWS, Docker, Kubernetes/AKS, Azure DevOps, Git, Linux

PROFESSIONAL EXPERIENCE

ELEVATE CREDIT

Data Scientist II | *Hybrid*

November 2025 - Present

- Developed and **productionized a risk of chargeoff (ROC) collections model**, beating existing third-party vendor solution performance and allowing the company to move our collections models in-house **saving \$100K+ annually**.
- Contributing to team development by **leading interviews**, mentoring new colleagues, and designing refreshed onboarding process
- Implemented a Snowflake feature store containing **50+ proprietary engineered attributes**, replacing ad hoc notebook logic with reusable, governed features.
- Implemented reusable **Streamlit** application for direct mail team selections automation hosted on Snowflake.

Data Scientist I | *Charlotte, NC*

June 2024 - November 2025

- Engineered end-to-end Azure ML pipelines to **reparameterize 10 production predictive models** monthly, reducing model refresh time from **two weeks to one day** and enabling quantitative drift monitoring. Led adoption of Azure ML engineering practices, including versioned data assets, registered environments and models, and reproducible training and deployment pipelines.
- Developed and productionized an XGBoost credit-risk model that **improved AUC by 13% over existing solution**; built a modular **~1,200-line Snowflake SQL** layer to transform raw XML into validated training datasets.
- Designed and deployed **Dockerized model inference APIs on Azure Kubernetes Service**, incorporating unit tests and standardized deployment workflows for production reliability.
- Built and maintained an internal Python package with 50+ reusable modules for feature engineering, validation, and lifecycle management; **adopted by a 15-member team across 12+ production projects**.

UNC CHAPEL HILL - COMPUTER SCIENCE | **Undergraduate Learning Assistant** | *Chapel Hill, NC*

Aug 2022 - May 2023

- Designed and taught an **MVC architecture** module in COMP 301 for 50+ students and provided Java debugging support focused on **object-oriented design** and software engineering principles. Assisted with exam question development and grading.

XYLEM INC. | Software Engineer Intern | *Raleigh, NC*

May 2022 - Aug 2022

- Developed three Angular application screens for an enterprise data-lake product and integrated customer data using **SQL and AWS**.
- Worked in an **Agile development** environment using Jira for tracking.
- Built Python scripts supporting enterprise security analysis for **1,000+ employees**.

SELECTED TECHNICAL PROJECT

ARDUINO MIDI LIGHT SHOW | **Personal Project**

July 2025

- Engineered a real-time, event-driven system using Python, multithreading, serial I/O, and embedded C++ to synchronize LED hardware with audio playback.
- Implemented a custom low-latency serial protocol and extensible architecture for dynamically mapping MIDI attributes to lighting patterns.
- Technical write-up and tutorial posted on Medium with video demo

EDUCATION, LEADERSHIP & CERTIFICATION

M.S. Analytics, NC State University | **May 2024**

B.S. Computer Science, Minor in Religious Studies, UNC Chapel Hill | **May 2023**

Leadership & Honors: Elected student team lead for U.S. Department of Education practicum; later selected as Elevate technical liaison for the 2026 practicum cohort; graduated with distinction from UNC Chapel Hill, member of the Honors college; HackNC 2022 Best Junior Hackers winner.

Certification: AWS Certified Cloud Practitioner