

Anni Bamwenda

562-328-7736 | Raleigh, NC | annibamwenda@gmail.com | [LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Software Engineer II with 3 years of experience building ML-backed systems, automation, and infrastructure validation tools. Strong Python engineer experienced in productionizing ML workflows, building automation, and improving reliability of large-scale systems.

EXPERIENCE

Bank of America

Charlotte, NC

Software Engineer II

Mar 2025 - Present

- Led CI/CD infrastructure enablement by consolidating scripts into version control, securing sensitive scripts, and deploying workflows using Jenkins and Ansible to ensure consistent execution across development and lower-level environments.
- Owned and built a Python-based analytics pipeline to audit Dynatrace API token usage and life-cycle, supporting secure API modernization and improving reliability of enterprise monitoring infrastructure.
- Built and productionized shell-based automation for on-demand server log analysis, enabling faster root-cause analysis during infrastructure downtime.
- Built a Python tool to automate server setup validation for Dynatrace deployments, reducing manual checks and improving deployment consistency.
- Designed an end-to-end ML pipeline for multi-output classification using multi-modal clinical and imaging data, with emphasis on feature engineering, evaluation tradeoffs, and model reliability in real-world data.

Data Scientist, Data Management Analyst

Feb 2023 – Mar 2025

- Designed an unsupervised machine learning pipeline to classify a large dataset of 80,000+ bank servers by function and design, achieving an 85% classification accuracy and improving incident response time.
- Led a team of 5 interns to build an email summarization tool using Python, achieving 90% parsing accuracy and improving executive communication workflows.

PROJECTS

Metastatic Cancer Diagnosis | *Python, Pandas, Scikit-Learn*

June 2024

- Engaged in a Women in Data Science datathon to develop a random forest model predicting metastatic cancer diagnosis durations to detect healthcare disparities.
- Performed extensive data cleaning and feature engineering for 20,000+ rows of data to handle missing values, outliers, and categorical data using Python and pandas.
- Leveraged GitHub to manage code versioning and document the project, fostering teamwork during the datathon.

Industry Classification and Analysis | *Python, NLP*

Feb 2022

- Created regular expressions and implemented lemmatization to preprocess text data, leading to an increase in data quality.
- Implemented word vectorization and tokenization to convert text into numerical form to optimize the machine learning process.
- Optimized cosine similarity metric through NumPy library to improve and evaluate the unsupervised learning model.

TECHNICAL SKILLS

Languages: Python, SQL, and Shell

ML & Data: scikit-learn, Pandas, NumPy, feature engineering, model evaluation

Systems & Tools: CI/CD, Jenkins, Bitbucket, Ansible Tower, Dynatrace, Bash, Subprocess, Argparse, automation scripting

Soft Skills: Collaboration, Problem-Solving, Communication, Adaptability

EDUCATION

Whittier College
Bachelor of Arts in Mathematics, Minor in Computer Science

Whittier, CA
Dec 2022

Cornell University
Graduate Certificate in Machine Learning

New York, NY
Aug 2022

Contra Costa College
Associate of Science in Mathematics

San Pablo, CA
May 2020