

# BRIAN TEMU

✉ [iq58974@umbc.edu](mailto:iq58974@umbc.edu) [in/brian-temu](https://in/brian-temu) [github.com/iam-dante](https://github.com/iam-dante) [www.iam-brian.dev/](https://www.iam-brian.dev/)

## EDUCATION

University of Maryland Baltimore County

*Master's in Data Science*

May 2025

Maryland

University of Dar es salaam

*Bachelor of Science in Computer Science*

Nov 2019 – Oct 2022

Dar es salaam

## SKILLS

**Programming Languages:** Python, JavaScript(TypeScript), C, C++, and SQL.

**Machine Learning:** Pytorch, TensorFlow, MLX, Scikit-learn, Pandas, Numpy, Seaborn, and Matplotlib.

**AI/ML Skills:** LLM fine-tuning, sentiment analysis, neural networks, and feature engineering.

**Tools:** ML flow, Visual Studio Code, Jupyter Notebook, Docker, Git, and Google Colab.

**Courses:** Algorithms, Big Data, Database Management Systems, Machine Learning, and Artificial Intelligence.

## WORK EXPERIENCE

Institute of Genome Science, UMB

*Data Science Intern*

May 2024 – Aug 2024

Maryland

- Leveraged **antiSMASH** to analyze Bacteria Vaginosis gene clusters, uncovering critical biosynthetic patterns linked to recurrent Bacteria Vaginosis.
- Applied statistical and bioinformatics methods to uncover genetic markers for targeted Bacteria Vaginosis research.
- Collaborated with researchers to align antiSMASH results with study goals, providing insights that guided the direction of BV research.

Softnet Technologies Ltd

*Software Engineer*

April 2022 – Aug 2023

Dar es salaam

- Designed and executed new features and enhancements, leading to a **15%** improvement in user experience.
- Reduced bugs by 25% and improved product quality through collaboration with the product owner.
- Led workshops on **Tailwind CSS** and **Figma**, achieving **90%** adoption, and saving using external templates.
- Implemented **Scrum**, achieving 20% more on-time project deliveries with 95% sprint goal success.

Tanzania Data Lab (dLab)

*Machine Learning Engineer Intern*

July 2021 – Sept 2021

Dar es salaam

- Expertly collected, cleaned, and transformed image data, ensuring top-quality training datasets that **achieved optimal model performance**.
- Collaborated with cross-functional teams, including software developers and domain experts, to deliver solutions that improved project efficiency by 20%.
- Researched and evaluated **machine learning algorithms** that boosted model evaluation by **15%**.
- Achieved significant performance improvements by applying transfer learning techniques increase accuracy by **12%**.

## PROJECTS

Vision Transformer | *Paper Replicatioin*

December 2023

- Identify key components from the paper mainly **transformer architecture** and attention mechanisms that were translated to modular pytorch code.
- Improve the accuracy by assessing the model performance using various metrics (accuracy, precision, recall etc) that are involved in optimizing the performance through transfer learning.

Real-Time Face-mask Detection System | *Computer Vision*

July 2022

- Designed a scalable computer vision system using **YOLOv5**, achieving 97% accuracy in real-world conditions.
- Curated a diverse dataset of masked and unmasked individuals, standardizing the model for enhanced performance.
- Utilized the layout editor to create a UI for the application in order to allow different scenes to interact with each other.

Baltimore Police Department Crime | *Data Analysis*

November 2023

- Gather insight into the increase in crimes by exploring and modeling to identify patterns and trends within the dataset that correlate with the change.
- Verifying the findings by conducting hypothesis testing to validate and draw actionable insight from the analysis.

## CERTIFICATION

DeepLearning.AI TensorFlow Developer Professional Certificate, Coursera

March 2023