

# Brian Temu

Baltimore, Maryland

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## EDUCATION

**University of Maryland, Baltimore County** *Master's in Data Science* GPA: 4.0

Aug 2023 - May 2025

**University of Dar es salaam** *Bachelor of Science in Computer Science*

Nov 2019 - Oct 2022

## SKILLS

**Programming Languages:** Python, Javascript, C, C++ and SQL.

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

**AI/ML Skills:** Large language models fine-tuning, sentiment analysis, neural networks, and feature engineering

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

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

## WORK EXPERIENCE

**Software Engineer, Sofinet Technologies Ltd,**

April 2022 - Aug 2023

- 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.

**Machine Learning Engineer Intern, Tanzania Data Lab (dLab)**

July 2021 - Sep 2021

- Collaborated with cross-functional teams including software developers and domain experts.
- 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%
- Expertly collected, cleaned, and transformed image data, ensuring top-quality training datasets that achieved optimal model performance

**Software Developer, University of Dar es Salaam Innovation Hub**

July 2020- Sep 2020

- Applied responsive design, increased mobile traffic by 50%, and improved overall conversion rates by 20%.
- Innovative UI design led to 40% higher user engagement and a 25% lower bounce rate on the website
- Collaborated with cross-functional teams to conduct usability testing and gather feedback, resulting in the implementation of key improvements

## CERTIFICATION

DeepLearning.AI TensorFlow Developer Professional Certificate, *Coursera*

March 2023

## ACCOMPLISHMENT

**Team Leader, Tanzania Data Lab (dLab)**

July 2021- Sep 2021

- Automated data preprocessing reduced cleaning time by 50%, improving model training.
- Lead a team of 4 people who successfully researched and adapted ideal model configurations for the system.
- Evaluated CNN, RCNN, and YOLO to select an optimal deep-learning architecture.

## PROJECTS

**Vision Transformer, Paper Replication**

- 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 Facemask Detection System, Computer Vision**

- Proactively optimized models for robust real-world performance in diverse settings.
- Curated a diverse dataset of masked and unmasked individuals, standardizing the model for enhanced performance.
- Explored CNN, RCNN, and YOLO architectures, choosing appropriate deep-learning models by comprehensive research.

**Baltimore Police Department Crime, Data Analysis**

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