Brian Temu

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Baltimore, Maryland

EDUCATION

University of Maryland, Baltimore County *Master's in Data Science* GPA: 3.88 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 Systems, Machine Learning, and Artificial Intelligence.

WORK EXPERIENCE

Laboratory Assistant Intern, *Institute of Genome Science UMB,* May 2024 - Aug 2024

- Interpret results to identify patterns and correlations within the bacterial vaginosis gene clusters.
- Utilize data science tools and techniques, such as statistical analysis, and bioinformatics software, to analyze genomic data associated with recurrent bacterial vaginosis.
- Collaborate with researchers to understand bacterial vaginosis study goals and provide data analysis insights

Software Engineer, *Softnet 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.
- Led 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 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.