EBASA G. TEMESGEN

Minneapolis, MN 55414   *Cell: (612)-986-6471*   *Email: ebagirma8@gmail.com*

EDUCATION

Doctor of Philosophy in Computer Science   **2022 - In progress**
University of Minnesota - Twin Cities   *Minneapolis, MN*

BSc. Electrical and Computer Engineering   **2016 - 2020**
Addis Ababa University   *Addis Ababa, Ethiopia*

EMPLOYMENT

Safaricom Ethiopia   **04/2022 - 08/2022**
Lead QA Engineer   *Addis Ababa, Ethiopia*

RESEARCH INTERESTS

Artificial Intelligence, Machine learning, Deep learning, Robotics, Intelligent Agents, Distributed Systems, Robotics, Computer Vision, intelligent Transportation systems, Swarm Robotics

RESEARCH EXPERIENCE

The University of Auckland, Empathic Computing Lab   **04/2021 - 12/2021**
Research Intern   *Auckland, New Zealand*

I worked on a machine learning model that analyzes changes in physiological signals in response to various emotional stimuli. I prepared Literature reviews, analyzed multiple datasets, and prepared and presented reports.

University of Michigan   **07/2019 - 08/2020**
Remote Research Intern   *Ann Arbor, MI*

Worked on bottlenecks analysis and Identification of Reinforcement Learning on Execution time, cache hit rate, CPU core usage, and overall memory usage—performance Comparison of different RL algorithms on frameworks and libraries in different CPU architectures.

TEACHING EXPERIENCE

University of Minnesota   **08/2019 - In Progress**
CSCI 4061 Introduction to Operating Systems   *Minneapolis, MN*

- As a Graduate Teaching Assistant, led recitation, prepared Lab exercises, and quizzes, graded assignments, prepared projects and graded projects, and graded exams.

Col. John C Robinson Addis American   **06/2019 - 09/2019**
Hardware programming   *Addis Ababa, Ethiopia*

- Taught hardware programming using C-Language, interfacing sensors with a microcontroller, and how to simulate circuits on proteus for high school and college students.

PUBLICATIONS

1. Saffaryazdi, N., Goonesekera, Y., Saffaryazdi, N., Hailemariam, N. D., Temesgen, E. G., Nanayakkara, S., Broadbent, E., & Billinghurst, M. (2022). *Emotion recognition in conversations using brain and physiological signals.* 27th International Conference on Intelligent User Interfaces, 229–242, DOI: 10.1145/3490099.3511148 [LINK]
2. Etori, Naome, Ebasa Temesgen, and Maria Gini. *"What We Know So Far: Artificial Intelligence in African Healthcare."* arXiv preprint arXiv:2305.18302 (2023). [LINK]

MEMBERSHIP

- **BLACKINAI** member
- **SHAPHEPREDS LAB** member
- **ETHIOPIAN SPACE SCIENCE SOCIETY** member

HIGHLIGHTS OF PROJECT EXPERIENCE

Capstone Project- Multi-UAVs for Precision Agriculture, Addis Ababa University, 2020
- Developed a program in ROS to implement path planning using Multiple UAVs, to capture, and analyze data from agricultural fields.
- Designed a deep learning model to analyze the collected data, and use a browser application to present for the user via an interactive dashboard.

SKILLS & RELEVANT COURSES

- **Programming Languages**: C/C++, Python, Matlab, Java, SQL, R, CSS, Javascript
- **Frameworks**: Pytorch, TensorFlow, ROS, Bootstrap, DJango, React
- **Databases**: SQL, MySQL
- **Machine Learning Algorithms:** Regression, Naïve Bayesian, K-means, Clustering, Decision Trees, Linear Optimization, Prediction, Forecasting- Data cleaning tools: OpenRefine
- **Relevant Certifications:** Microsoft Azure Fundamentals, HPE ATP - Hybrid IT Solutions
- **Languages:** English (Professional), Amharic (Native), Afan Oromo (Native), ASL (Intermediate)