MELCHIZEDEK MASHIKU

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Mgm79.github.io

PROFESSIONAL EXPERIENCE

Malaria Atlas Project, Big Data Institute, University of Oxford, Oxford, UK October 2019 – December 2019
Machine Learning Engineering Intern

- Spatial temporal epidemiology methods survey for geometric deep learning algorithm to predict the risk of malaria in low-endemicity context using machine learning on complex network.
- AWS Machine Learning Research Award for A Bayesian Reinforcement Learning Algorithm to Predict the Risk of Malaria in Low-endemicity Context, supervised under Dr. Andre Python and Dr. Katherine E. Battle

Georgia State University Research Solutions, Atlanta, GA September 2018 – October 2019
Research Software Engineer

- Built and published case study work for architecting and engineering a solution for predicting calcium binding sites with a graph theory approach implemented on AWS serverless pipeline for protein molecular nuclear computational chemistry modelling.

Aptos, INC, Atlanta, GA January 2019 – May 2019
Software Engineering Development - Co-operative

- Created an in-house react-electron diagnostic and analysis tool for order management system (OMS) used by business and quality analysts.
- Fixed credit card and penny rounding transactions in main commercial OMS site.
- Created order summarization pipeline with a recurrent neural network model trained in python and integrated to react application with TensorFlowJS.

National Aeronautics and Space Administration, Greenbelt, MD
Software Engineering Intern June 2018 – August 2018

- Designed user interface and experience for displaying Space Network (SN) assets and services on *SN Now*.
- Developed custom angular components and created animated Scalable vector graphics (SVG) for front-end.
- Presented project to management of Space Communication and Navigation (SCaN).

Software Engineering Intern June 2017 – August 2017

- Developed back-end of "SAGE-EGS Remote Status Display Demonstration" for STPSat-6 Antennas and Ground Equipment (SAGE) - Enterprise Ground Services (EGS).
- Incorporated, generating standard messages, reading and parsing data in real time and web socket, and publishing results on a message bus.
- Presented project to management of Space Communication and Navigation (SCaN).

ADDITIONAL INFORMATION

- **Publications**: Mashiku, M., & Edirisinghe, N. (2019, July). Serverless Science Gateway Development for Ca2+ binding site prediction on Amazon Web Services: Case Study. In *Proceedings of the Practice and Experience in Advanced Research Computing on Rise of the Machines (learning)* (p. 56). ACM.
- **Technical Skills**: Python, JavaScript, Java, C/ C++, PyTorch, React, Electron, FastAPI, Google Cloud, Amazon Web Services, Docker
- **Awards & Honors**: 2019 National Science Foundation Center for Neurotechnology Hackathons Winner, Science Gateways Community Institute Hackathons Winner and Georgia Governor's Honors Program 52

EDUCATION

Georgia State University, Atlanta, GA Completed 57 Credits: 2016 - 2018
Bachelor of Science, Computer Science

Cedar Shoals High-School, Athens, GA Graduated 2016