Vusumuzi Ngwazini

Email: vusumuzi.ngwazini@gmail.com LinkedIn: @vusumuzi-ngwazini Portfolio: vusa.io/projects

EDUCATION Oakwood University, Huntsville, Alabama Bachelor of Computer Science

Graduation: May 2019 GPA: 3.67

SKILLS Programming Languages Frameworks Environments

C++ & Kotlin React, Flutter, Bootstrap Windows
Java & Python JavaScript & Material-UI Linux & Mac

PROFESSIONAL EXPERIENCE

Check On Them - Android & iOS App Software Engineer, Cross Platform June 2021 – Currently Check On Them, a cross platform app, is designed for people who struggle with keeping up with or following up with other people. My app simply selects people from your contacts each day and gently suggests that you 'check on them'.

- Developing main features & designing layouts utilizing Flutter SDK & Android Studio.
- Expanding features based on user feedback and suggestions.

Bhala - African Keyboard

Software Engineer, Android

March 2021 - April 2021

Bhala is an African startup featuring a multilingual keyboard that learns your writing style and makes writing in African languages faster by leveraging artificial intelligence designed for African languages.

- Migrating the underlying legacy library to Kotlin to increase efficiency and compatibility.
- Developing API and features for published, customer-facing android app utilizing Kotlin & Firebase.

Wala Digital Health

Software Engineer, Full Stack

October 2020 - February 2021

Harvard and MIT alumni-founded startup featuring a SaaS Software connecting hospitals and donors for critical life-saving transfusions.

- Developed a single-page application for online blood management through the software development life cycle, utilizing the React framework on the front end, and MongoDB and Strapi on the back end.
- Built core features & functionalities for minimal viable product based on client needs and feedback.
- Unit testing and REST API endpoint testing using Jest JavaScript testing framework.
- Software and system design, documentation, and integration.

Bantucracy

Software Engineer, Frontend

August 2020 – November 2020

Boston research-based tech & tech policy startup company with a strong focus on ubuntu ethics, technology and human rights.

- Built the landing page and main features of a minimal viable product from concept to deployment as specified by the UI/UX team and customer.
- Developed front-end components and assisted in back-end development of RESTful web service utilizing Bootstrap 4, React, Node.js, Express.js, MongoDB, Next.js, Material-UI, Strapi, and Docker.

Lockheed Martin Aeronautics

Software Engineer, Backend

July 2019 - August 2020

- Large-scale enterprise software design and feature development utilizing C++, Java, and Python in both Linux and Windows virtual environments.
- Graphical user interface tool development with Java Swing, JavaFX toolkits, & C++ QT Framework.
- Continuous integration pipelining, test automation, and version control using Bitbucket, Jira, & Jenkins.
- Coding sprints, team standup meetings, and peer code reviews leveraging Scrum Agile Framework.

Oak Ridge National Laboratory

Intern, Machine Learning

Spring 2019

- Utilized high-speed sensor data to train neural networks to predict the amplitude of aperiodic signals.
- Visualized engine and neural network performance data to serve as a baseline for future development.

- Developed SQL based program (Cerner Coding Language) to mine the Cerner API for data on mothers and their newborns to track hospital acquired infections (HAI) and cross-contamination rates.
- Visualized and analyzed data with Power BI and Oracle BI for Clinical Applications team.

Information Consultants

Intern

Fall 2017 - Spring 2018

• Built input forms and designed back-end workflows to automate business processes and push data to client databases.

Information Inclusion Institute

Intern

Summer 2017

• Utilized Python to mine for JSON data on the Twitter API & performed analysis utilizing R-Studio to measure the impact of a major social event through social media platforms in real time.

PERSONAL PROJECTS

Khumbula - Android Game

Software Engineer, Android

January 2021 – Currently

Khumbula, meaning "remember" in the Zulu language, is an open-source African themed <u>matching game</u> that serves the goal of sharpening our user's short-term memory by finding pairs of tiles in the shortest number of moves.

• Developing main activities, & XML layouts for our published app utilizing Kotlin & Android Studio.

LEADERSHIP EXPERIENCE

National Society of Black Engineers

President

Fall 2018 - Spring 2019

- Tripled volunteering efforts, community involvement, and chapter membership by 266%.
- Secured sponsor for chapter, doubled fundraising efforts, and raised chapter budget by 100%.
- Launched long-term partnership with STEM Lab at local Boys & Girls club for engineering mentorship program.

African Student Association

Vice-President

Fall 2018 - Spring 2019

- Doubled volunteering efforts, community involvement, and chapter membership by 100%.
- Collaborated with local universities and shops to secure sponsors, authentic food vendors, fashion designers, and performers for our annual African Culture Showcase.

RESEARCH EXPERIENCE

Information Inclusion Institute

Researcher

Summer 2017 – Winter 2018

iConference 2018 - Research Paper & Poster

• "Cognitively Salient Wayfinding Aids for Emergency First Responders"

Published

iConference 2019 - Research Paper & Poster

• "Firefighters' Strategies for Processing Spatial Information During Emergency Rescue Searches"

Published

ACADEMIC ACHIEVEMENTS

AACE Outstanding Intern of the Year

Spring 2019

Dean's List

Spring 2016 – Fall 2019

Dr. Carmen Wright & Chandler Foundation Scholarship

Spring 2018