

## EDUCATION

**Department of Computer Science, School of Natural Sciences, University of Zambia**  
Lusaka, Zambia

*MSc. in Computer Science* 2019

- Advisor: Dr. Jackson Phiri
- Research area: ICT4D and Remote Sensing

**Department of Computer Science, School of Natural Sciences, University of Zambia**  
Lusaka, Zambia

*BSc. in Computer Science (Software Engineering)* 2015

- Classification: Merit

## PUBLICATIONS

1. Qin Wenda, Etter Lauren, **Simukanga Alinani**, Gill Christopher, & Betke Margrit. Age-constrained Ear Recognition: The EICZA Dataset and SASE Baseline Model. *2023 IEEE International Joint Conference on Biometrics (IJCB)*, 2023.
2. Kawesha Francis, Phiri Jackson, & **Simukanga Alinani**. A Predictive Model to Support Decision Making for the Accreditation of Learning Programmes using Data Mining and Machine Learning. *Pan African Conference on Science, Computing and Telecommunications (PACT) 2023*, 2023.
3. **Simukanga Alinani**, Etter Lauren, Qin Wenda, Pieciak Rachel, Betke Margit, Macleod William, Phiri Jackson & Gill Christopher. Ethical issues associated with the development of an ear biometric tool for patient identification in Zambia. *Global Forum for Bioethics in Research (GFBR)*, 2022.
4. **Simukanga Alinani**, Kobayashi Misaki, Etter Lauren, Qin Wenda, Pieciak Rachel, Albuquerque Duarte, Chen Yu-Jen, Betke Margrit, Macleod William, Phiri Jackson, Mwananyanda Lawrence & Gill Christopher. The impact of ear growth on identification rates using an ear biometric system in young infants. *Gates Open Research*, 2021.
5. Etter Lauren, **Simukanga Alinani**, Qin Wenda, Pieciak Rachel, Mwananyanda Lawrence, Betke Margrit, Phiri Jackson, Carbo Caroline, Hamapa Arnold & Gill Christopher. Project SEARCH (Scanning EARs for Child Health): validating an ear biometric tool for patient identification in Zambia. *Gates Open Research*, 2020.
6. **Simukanga Alinani**, Phiri Jackson, Nyirenda Mayumbo, & Kalumbilo-Kabemba Monica. ICT in Governance Systems: A Case Study of the FISP Farmer Registration System. *ZAPUC*, 2018.
7. Chihana Sipiwe, Phiri Jackson, Kunda Douglas, & **Simukanga Alinani**. Securing Grain in Transit for the Food Reserve Agency Based on the Cloud Model. *ZAPUC*, 2018.
8. **Simukanga Alinani**, Phiri Jackson, Nyirenda Mayumbo, & Kalumbilo-Kabemba Monica. E-Governance Systems: A Case Study of the Development of a Small-Scale Farmer Database. *Zambia Information Communication Technology (ICT) Journal*, 2018.
9. **Simukanga Alinani**, Muhone Madaliso, Mulenga Joseph, Phiri Jackson, & Nyirenda Mayumbo. Creation of an Agricultural Geographical Information System. *Zambia Information Communication Technology (ICT) Journal*, 2018.

EMPLOYMENT	<b>University of Edenberg, Lusaka, Zambia</b>   Lecturer	08/07/2024 - Present
	<ul style="list-style-type: none"> <li>Lecturer of <i>Computer Architecture and Organization</i> and <i>Programming with Python</i>.</li> <li>Coordinator of Undergraduate and Postgraduate classes under the School of Computer Science.</li> </ul>	
	<b>ZCAS University, Lusaka, Zambia</b>   Part-time Lecturer	28/02/2024 - Present
	<ul style="list-style-type: none"> <li>Taught <i>Cyber Security Operations (CIT4351)</i> to full-time, part-time, and distance students (21). Organised and conducted laboratory sessions to familiarise students with commonly used tools in cybersecurity.</li> <li>Taught <i>Component and Connection Security (CIT3362)</i> and <i>IoT Fundamentals: IoT Security (CIT3352)</i> to full-time, part-time, and distance students (18).</li> </ul>	
	<b>Project SEARCH (Boston University &amp; University of Zambia)</b>	2018 - 2023
	<ul style="list-style-type: none"> <li>Continued work on the SEARCH application.</li> <li>Conducted tests on the longitudinal ear dataset to demonstrate application performance with growth as a factor.</li> <li>Authored a paper on the growth study results.</li> </ul>	
	<b>Project SEARCH (Boston University &amp; University of Zambia)</b>	2018 - 2023
	<ul style="list-style-type: none"> <li>Continued work on the SEARCH application.</li> <li>Conducted tests on the longitudinal ear dataset to demonstrate application performance with growth as a factor.</li> <li>Authored a paper on the growth study results.</li> </ul>	
	<b>EQUIP Lusaka, Zambia)</b>   Application Developer	2020
	<ul style="list-style-type: none"> <li>Assisted in developing the Project SEARCH application on the Android platform.</li> <li>Worked closely with personnel in Boston to analyse data, interpret analysis, and incorporate changes into the app.</li> <li>Worked with Dimagi to ensure smooth integration between the CommCare and SEARCH applications.</li> </ul>	
	<b>University of Zambia)</b>   Part-time Tutor	2017
	<ul style="list-style-type: none"> <li>Provided support during the laboratory sessions of the Electronics course.</li> <li>Assisted in the supervision of a few undergraduate capstone projects.</li> </ul>	
	<b>AWARDS AND HONORS</b>	
	• <b>Best Poster Award</b> , IEEE International Joint Conference of Biometrics (IJCB)	2023
	• <b>Best Graduating Male Student in the School of Natural Sciences</b> , University of Zambia	2015
SKILLS	• <b>Dean's Prize - Best Overall Third-Year Student</b> , University of Zambia	2014
	<b>Programming:</b> Python, C++, Java, Embedded System Development.	

## REFERENCES

**Dr. Jackson Phiri** | Associate Professor

University of Zambia  
School of Natural Sciences  
Department of Computer Science  
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**Dr. Christopher J. Gill** | Senior Program Officer

Bill & Melinda Gates Foundation  
Global Health  
Integrated Clinical Vaccine Development  
christopher.gill@gatesfoundation.org

**Dr. Mayumbo Nyirenda** | Senior Lecturer

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School of Natural Sciences  
Department of Computer Science  
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