

Accomplished researcher with a Ph.D. in Information Systems and Technology and over six years of experience at the intersection of Information systems, computational social science, natural language processing (NLP), machine learning, and social media analytics. Expertise in designing innovative tools and methods for analyzing digital behavioral data, addressing societal challenges such as misinformation, civic engagement, and financial literacy. I am skilled in interdisciplinary collaboration, project management, and knowledge dissemination.

Education

1. PhD in Information Systems & Technology, 2023 University of Kwazulu-Natal, South Africa
Dissertation: Personality Prediction on Social Media using Fuzzy Logic and Machine Learning Classifiers
 2. MSc in Information Technology (MScIT), 2015 Strathmore University, Kenya CPA Finalist, KASNEB, 2015
 3. BCom in Management Information Systems, 2012 Daystar University, Kenya
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Certifications

1. Master Class for Teaching Online Issued by e-Learning Partner
 2. Designing Your Online Course Issued by Quality Matters Focused on building effective online courses, emphasizing structure, engagement, and learning outcomes
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Selected Publications

1. Mursi, J. K., & Nach, H. (2024). Finlingo: A Conversational AI for Enhancing Financial Literacy Education in Africa. Presented at the 2024 IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD), United Arab Emirates.
2. Nach, H., & Mursi, J. (2024). Financial Inclusion Through Frugal Innovation: Cases from Emerging Economies. In D. Salampasis & P. Schüffel (Eds.), Research Handbook on FinTech. Edward Elgar Publishing Ltd. In Press.
3. Mursi, J. K., & Nach, H. (2024). Finlingo: Towards enhancing Africa's financial literacy education with AI. ASAC 2024 Proceedings, Montréal.

4. Mursi, J. K. A., Subramaniam, P. R., & Govender, I. (2023). Exploring the Influence of Preprocessing Techniques in Obtaining Labelled Data from Twitter Data. IEEE Explore.
 5. Wamuyu, P. K., & Mursi, J. (2020). Customer Profiling from Social Media Engagement using LDA and Sentiment Analysis Approach. 10th Annual Conference Kabarak University.
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Relevant Experience

May 2025 – Present

Assistant Professor -Data Science - Daystar University -Nairobi-Kenya

- i. Delivered courses in Database Systems, Software Engineering, Business Analytics, and Social Media Analytics, integrating practical case studies to bridge academia and industry.
- ii. Supervised students' research projects, emphasizing actionable insights and evidence-based approaches.
- iii. Facilitated partnerships with industry stakeholders for collaborative projects and real-world applications (Startup 10 & Finlingo).
- iv. Participated in student mentorship and department activities.

Jan 2022 – Dec 2024

Adjunct Faculty - United States International University-Africa Nairobi-Kenya

- i. Delivered courses in Database Systems, Software Engineering, Business Analytics, and Social Media Analytics, integrating practical case studies to bridge academia and industry.
- ii. Supervised students' research projects, emphasizing actionable insights and evidence-based approaches.
- iii. Facilitated partnerships with industry stakeholders for collaborative projects and real-world applications (Startup 10 & Finlingo).
- iv. Participated in student mentorship and department activities.

May 2024 – May 2025

Curriculum Development Lead (Consultant) – Daystar University & USIU-Africa

- i. Led the design of the Master of Science in Applied Data Science program at Daystar University, integrating courses such as ethics, research, and data protection.
- ii. Contributed to developing the Master of Science in Applied Data Science program at USIU, incorporating AI, machine learning, and big data trends.
- iii. Supported the creation of a Bachelor of Science in Data Science program and online data science courses at USIU.
- iv. Designed innovative curriculum delivery approaches to address industry and societal challenges.

- v. Fostered collaboration with stakeholders to align program goals with institutional strategies and market demands.

Jan 2022 – Dec 2024

Research Lead, SIMElab Africa, USIU-Africa Nairobi-Kenya

- i. Oversaw a team of 21 researchers on projects in social media misinformation, digital well-being, mental health, user research, and NLP.
- ii. Directed the development of Habari Harbour, a social media listening tool to empower African content creators and combat misinformation.
- iii. Spearheaded Uzazi AIOT, a maternal health tracking prototype using AI and IoT technologies.
- iv. Designed strategic frameworks to align research outputs with organizational goals.
- v. Facilitated capacity-building programs, mentoring junior researchers.

April 2023 – Present

Co-Founder & Research Lead, IwazoLab Nairobi, Kenya

- i. Led the development of Finlingo, an AI-powered platform for financial literacy, real-time scam detection, and adaptive learning.
- ii. Directed research and surveys on behavioral analytics, financial literacy, and customer preferences to improve AI-driven models.
- iii. Managed a research team integrating large language models (LLMs) and supervised data collection quality control.
- iv. Co-authored research presented at international conferences and collaborated with global experts.

Jan 2017 – Oct 2020

Graduate Research Assistant, University of Kwazulu-Natal, Durban-South Africa

- i. Delivered tutorials on introductory data science modules.
- ii. Provided guidelines for course projects and survey question preparation.
- iii. Trained and supervised 20 Honors students on data coding tasks, enhancing research productivity.

June 2013 – Jul 2016

Senior Audit Associate KKCO East Africa

- i. Led audit teams conduct audits and guide clients in improving information system procedures.
 - ii. Provided guidance on risks and controls, promoting a sound financial control environment.
 - iii. Collaborated on audit program development, determining objectives, scope, and schedules.
 - iv. Communicated audit findings and presented reports in board meetings.
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Grants and Awards

- KENET Travel Grant: KES 200,000 for participation in the 6th IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD), United Arab Emirates, November 2024.

Leadership and Volunteer Positions

1. University Council Member, KAG East University May 2023 – May 2026
2. K-Teens Teacher & Media Ministry Volunteer, ICC Kitengela March 2022 – Present
3. Lead Mentor, NiweBora Leadership Programme Sept 2021 – Present

References

- i. Dr. Patrick Kanyi Wamuyu, Dean, School of Graduate Studies, United States International University, kanyiwamuyu@gmail.com | +254722309076 Relationship: Immediate Supervisor
- ii. Rev. William Odero, Senior Pastor, ICC-Kitengela william.odero@gmail.com | +254723733003
- iii. Prof. Prabhakar Subramaniam Rontala Associate Professor, Information Systems and Technology, University of KwaZulu-Natal, prabhakarr@ukzn.ac.za | +27312607704 Relationship: PhD Supervisor