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CURRICULUM VITAE

Personal Profile

I am always seeking to develop and enrich my understanding of my career for professional excellence through my research, technical and managerial skills experience and seeking knowledge in continuous studies, working experience and solving real-world challenges.

I am a team player with a practical approach to problem solving and the precision required to ensure that deadlines, budgets and target goals are achieved with value addition as a priority.

- I am an organized and creative person willing to make the extra effort to address any work related issue; very dynamic and flexible with the advancing technology.
- Possesses good leadership skills with high ethical values and commitment.

CAREER OBJECTIVE

EDUCATION AND QUALIFICATION

YEAR(S)	SCHOOL/INSTITUTION	AWARD
2020 - 2024	University of Rwanda	PhD in Internet of Things – Embedded Computing Systems Research Area: Internet of Things (IoT) in Healthcare Systems
2018 - 2019	Uganda Management Institute (UMI)	PGD - Project Planning & Management (1st class)
2013 - 2016	Makerere University	MSc. Data Communications and Software Engineering (Research Area: Wireless Mesh Networks)
2007 - 2011	Busitema University	BSc. in Computer Engineering (1st Class degree)
2005 - 2006	Nabisunsa Girls School	Uganda Advanced Certificate of Education (U.A.C.E)
2001 - 2004	Maryhill High School	Uganda Certificate of Education (U.C.E)

WORKING EXPERIENCE

YEAR	TITLE, INSTITUTION AND DUTIES PERFORMED
2019 – To-date	Assistant Lecturer Busitema University



	<p>Activities:</p> <ul style="list-style-type: none"> • Teaching, Research & Outreach • Curriculum development and review • Coordinating and monitoring teaching and learning • Organizing, developing and directing activities for the proper functioning of the Department • Research dissemination through Outreach • Performance assessment of students.
Jan 2013 – 2018	<p>Teaching Assistant Busitema University</p> <p>Activities:</p> <ul style="list-style-type: none"> • Teaching, Tutorial delivery & Outreach • Provide technical support and support supervision • Undertake research to support the development of the university academic research proposals. • Supervise students’ academic research and industrial practice programmes and activities
Nov 2011 –Dec 2012	<p>Data Entry Officer Ministry of Lands, Housing and Urban Development</p> <ul style="list-style-type: none"> • Data entry, sorting and vetting of land titles

TRAININGS AND WORKSHOPS ATTENDED

YEAR(S)	SCHOOL/INSTITUTION	Name of Event
October-December 2024	Rhodes University, South Africa	DOCTAS Grant Writing Training
April, 2023 – To date	Seoul National University – South Korea	PhD Research Exchange program among University of Rwanda, University of Rwanda & PASET (Scholarship funders)
October, 2022	PASET-Regional Scholarship Innovation Fund (RSIF)	Data Science, Research Methods and Statistics
July 2022	PASET-RSIF	Technical Monitoring and Evaluation
February 2022	PASET-RSIF	Science Communication Training including presentations, posters & pitching
September, 2021	PASET-RSIF	Information Literacy and Reference Management
July, 2021	University of Rwanda – College of Science and Technology,	Advanced Professional Health Information Systems

	Rwanda.	
February, 2021.	University of Rwanda – College of Science and Technology, Rwanda.	Industry Seminar - Fiber Optic Access Technologies
8 th – 12 th July 2019	Busitema University	e-learning content development workshop (Supported by African Development Bank – ADB)
30 th Oct–7 th Nov 2018	Busitema University	Open Distance Learning (ODL) Course Content Development and Delivery (Supported by CoL)
September, 2016	University of Pretoria, South Africa	Open Distance Learning (ODL) Training of Trainers Learner Support workshop organized by Commonwealth of Learning (CoL).

SPECIAL ABILITIES

- Science writing and communication skills
- Communication, leadership and managerial skills
- Setting personal objectives and goal oriented.
- Critical assessment of progress towards objectives
- A team player and an effective time manager
- Ability to acquire knowledge and skills and deliver them to other people
- Ability to reflect and learn from experience
- Creative and flexible

PhD AREA OF RESEARCH

Research Topic: Architectural Design of IoT-based Healthcare Heterogeneous Traffic: Performance Analysis and Optimization.

MASTER’S DEGREE AREA OF RESEARCH

Dissertation: Delay Modelling of VoIP traffic in Wireless Mesh Networks under Correlated Inter-arrival times

RESEARCH PUBLICATIONS

JOURNAL PAPERS

2024 IEEE Digital Education and MOOCS Conference (DEMOcon): Digital Twins Applications in STEM Education: Challenges and Implementation Opportunities in Developing Countries

URL: <https://ieeexplore.ieee.org/abstract/document/10747951>

6th International Conference on Artificial Intelligence in Information and Communication (ICAIIIC2024): Performance Analysis of Delay and Size-Dependent Scheduling for IoT-based Healthcare Traffic Using Heterogeneous Multi-Server Priority Queuing System:

URL: <https://ieeexplore.ieee.org/document/10463299>



Barbara Kabwiga Asingwire, Louis Sibomana, Alexander Ngenzi, Charles Kabiri, 2023. Delay and size-dependent priority-aware scheduling for IoT-based healthcare traffic using heterogeneous multi-server priority queueing system. IET Communications, Volume 17 Issue16, Pages 1877-1887.
URL: <https://doi.org/10.1049/cmu2.12675>

Barbara Kabwiga Asingwire, Alexander Ngenzi, Louis Sibomana and Charles Kabiri, 2021. Performance Analysis of IoT-based Healthcare Heterogeneous Delay-sensitive Multi-Server Priority Queueing System. International Journal of Advanced Computer Science and Applications, Volume 12 Issue 10, 2021.
URL: <https://thesai.org/Publications/ViewPaper?Volume=12&Issue=10&Code=IJACSA&SerialNo=73>

Okopa, Michael; Nambasa, Ruth; **Asingwire, Barbara K.**;2017. Modeling Delay and Energy Consumption for Wireless Sensor Networks with High Coefficient of Variability.
URL: <https://hdl.handle.net/123456789/71>

Nansamba, B., K.S. Kaawaase and **B.K. Asingwire**, 2017. Pricing scheme for heterogeneous multiserver cloud computing system. Aust. J. Comput. Sci., 4: 32-43.
DOI: [10.3923/aujcs.2017.32.43](https://doi.org/10.3923/aujcs.2017.32.43)

Asingwire, B.K., M. Okopa and T. Bulega, 2016. Modeling Performance of VoIP Traffic over 802.11 Wireless Mesh Network Under Correlated Inter-arrival Times. Int. J. Digital Inf. Wireless Commun., 6: 122-138.
DOI: [10.17781/P002040](https://doi.org/10.17781/P002040)

CONTRIBUTION TO SOCIETY

Worked on a project; “**Uganda Traffic Crime Management System**” with Uganda Police.

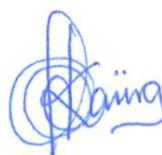
This project was initiated to help reduce on the numerous traffic offenses committed by road motorists on the road by ensuring that the penalty receipts issued by traffic police to the offenders are duly paid in Bank.

INTERESTS

- Researching about advancements and innovations in communication technology
- Reading books of different kinds for the acquisition of knowledge in different fields
- Social Interaction for the purpose of enhancing knowledge, skills and also for relaxation
- Public Speaking with an aim of improving the knowledge, skills and well-being of the listeners
- Travelling and touring places and experiencing various cultures and lifestyles
- Participating in Policy development and amendment
- Influencing and participating in any activity that produces positive change at any level.

LANGUAGES

Language	Spoken	Written
English	Very Fluent	Excellent
Rukiga / Runyankole /Luganda (Local direct)	Very Fluent	Excellent
French	Fair	Fair



REFEREES

1. Dr. Louis Sibomana
Head of Science & Technology Development and outreach Department,
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2. Dr. Owomugisha Godliver
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3. Dr. Tony Bulega
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