

CURRICULUM VITAE FOR REHEMA BAGUMA

Name	Rehema Baguma (PhD)
Nationality	Ugandan
Country of permanent residence	Uganda
Contact Information	Rehema.baguma@gmail.com , rbaguma@cit.ac.ug , rehema.baguma@mak.ac.ug +256782319000

Education

Year of study	Qualifications	Institution
2023	Certificate in Artificial Intelligence Policy	Centre for AI and Digital Policy USA
2017	Post Graduate Diploma in Education Technology	University of Cape Town, South Africa
2005 – 2010	PhD Information Systems	Radboud University, the Netherlands
2001-2003	MSc. Computer Application Technology	Huazhong University of Sc. & Tech., China
1999-2000	PGD Computer Science	Makerere University
1996-1999	Bachelor of Information Science (Upper Second Class)	Makerere University

Other Trainings

2014-2015 Post Graduate Certificate in Monitoring and Evaluation, Saarland University, Germany

Work Experience

July 2022 to-date **Associate Professor, Department of Information Systems, Makerere University.**

Key responsibilities:

- Promotion of knowledge of my subject through contribution of original work, teaching, examining and provision of academic leadership and guidance to junior staff and students;
- Research, writing and publishing research articles;
- Writing research funding proposals;
- Research mentorship for Junior Faculty;
- Community outreach and any other duties assigned by the administration.

Jan. 2016 to March 2017 - **Research Fellow/Consultant**, United Nations University Operating Unit on Policy Driven Electronic Governance (UNU-E-GOV): <https://egov.unu.edu/>

Key responsibilities:

- Providing support to the knowledge society project:
http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/ifap/knowledge_societies_policy_handbook.pdf
- Organisation (as Programme Committee Co-Chair) of the Annual International Conference on Theory and Practice of Electronic Governance (ICEGOV2017) that was held in New Delhi, India from 7th to 9th March 2017;
- Preparing funding proposals;
- Participation in recruitment and supervision of Research Fellows.

2011-July 2022 -**Senior Lecturer/Researcher Department of Information Systems, Makerere University.**

Key responsibilities:

- Promotion of knowledge of my subject through contribution of original work, teaching, examining and provision of academic leadership and guidance to staff and students;

- Research, writing and publishing research articles;
- Writing research funding proposals;
- Community outreach and any other duties assigned by the administration.

2018-to-date - **Coordinator, Development Informatics Research Group**, Makerere University.

Key responsibilities:

- Sourcing, scheduling and chairing research talks on ICT4D;
- Leading writing of research funding proposals;
- Organizing and facilitating student mentorship workshops;
- Offering one on one mentorship to graduate students and junior staff;
- Administration of the group's mailing list.

2010-211 **Records & Information Manager** (Acting on secondment), Records & Information Division, Directorate of Human Resources, Makerere University.

Key responsibilities:

- Providing leadership to the division in line with HR policy;
- Overseeing HR Information System (HURIS) and providing professional advice to all stakeholders in line with the University Strategic plan and HR Policy;
- Developing work targets for the division in line with the HR strategic plan;
- Initiating, reviewing and monitoring policies and procedures on records and information in line with the University Strategic Plan;
- Reviewing and eliciting specifications for changes in IT and HR processes in line with the University Information Policy;
- Coordinating with other systems: Academic Records Information System (ARIS), Finance Information System (FINIS) and Makerere University Library Information System (MAKLIBS);
- Managing performance, mentoring, guiding and appraising division staff in line with HR policies;
- Planning, budgeting and accounting for the division's resources in line with the Directorate's strategic plan;
- Performing any other related duties assigned by the Director HR.

2008-2010 - **Head, Department of Information Systems**, Makerere University.

Key responsibilities:

- Organization and development of the Department and such other duties necessary for the proper functioning of the department;
- The promotion of knowledge of my subject through contribution of original work, teaching, examination and provision of academic leadership and guidance to staff and students;
- Soliciting of funds for research and general development of the department;
- Chairing departmental appointments/promotions advisory committees and other departmental committees;
- Preparation and control of the departmental estimates including evolution of the departmental plan and proposals for human resource requirements;
- Initiating review of the departmental curricula from time to time and recommending it to the School board for the necessary changes;
- Preparation of departmental leave roster in liaison with the Dean;
- Submission of annual appraisal reports on members of staff in the department;
- Participation in recruitment, selection, promotion and disciplinary cases of departmental staff;
- Generally assisting in the operation of the School and the University by serving on Committees and performing other duties assigned by the Dean.

2006-2009 - **Assistant Lecturer**, Department of Information Systems, Makerere University. The key responsibilities were teaching, examining and provision of academic leadership and guidance to students (undergraduate and post graduate diploma).

2005-2008 – **Monitoring and Evaluation Resource Person (Consultant) for ICT for Development projects funded by IICD-Netherlands in Uganda (part time)**. Responsible for:

- Working with Uganda ICT4D partners to collect and enter monitoring data into the central M & E system;
- Analyzing data using the SPSS statistical package;
- Preparation of learning reports from the analyzed data;
- Presenting/sharing the reports with partners in learning workshops for validation and learning for continuous improvement.

Research Projects

1. 2023-2025- Principal Investigator for **Improving AI Models through Community Feedback** funded by Google under Research Collabs Africa Programme
2. 2022-2023-Co-Principal Investigator for **Global Approaches to Responsible AI for large language models (LLMs)** funded by Google under Research Collabs Africa Programme
3. 2019-2023-Co-Principal Investigator for **Enhancing Quality and Internationalization of Study Programmes through Mobile Transformative Pedagogy (EQIP)** funded by the Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education (DIKU).
4. Nov.2019-May 2020-Principal Investigator for **An App for Counseling Youth on Psycho-Social Issues: A Case of University Students** (*a scale up of the project in 3 below*), funded by the Ministry of ICT and National Guidance under the National ICT Initiative Support Programme (NISP).
5. 2018-2019-Principal Investigator for **An App for Counseling Youth on Psycho-Social Issues: A Case of University Students**, funded by the seed funding from the College of Computing & Information Sciences, Makerere University.
6. 2013-Co-Principal Investigator for **the role of Open Access in the Maturing Process of IT Research Education in East Africa**, in partnership with Karlstad University Sweden, funded by SPIDER.

Industry Assignments

1. May 2024 to-date – Development of the ICT Policy for Uganda Prisons Service (UPS)
2. July to August 2024 - Researcher on strengthening education data systems in Uganda in terms of structure, data demand and supply, data integration and data use practices for Health Information Systems Program (HISP) Uganda
3. 2023 - Development of Data Protection and Privacy Protocol/Guidelines for the Social Protection and Jobs (SPJ) Sector in Ethiopia Funded by World Bank.
4. February to April 2022 – Review and assessment of the status and integration needs of existing Management Information Systems (MISs) in Child Care and Protection under the Ministry of Gender, Labour and Social Development (MGLSD) supported by UNICEF and USAID.
5. June – Dec. 2021 - Development of a Justice Law and Order Sector (JLOS) Information Systems Integration Framework for JLOS Secretariat funded by EU.

6. December 2020 – May 2021 - Development of An Online Training Toolkit (based on analytical findings of the 2020 UN E-Government Survey for the UN Department of Economic and Social Affairs (UNDESA).
7. 2019-2020 - Local Project Coordinator & E-government Expert for the Development of a Strategy to enhance and sustain the Information and Communications Technology (ICT) Function in the Government of Uganda under the United Nations Operating Unit on Policy Driven Electronic Government (UNU- EGOV) for the Ministry of ICT & National Guidance/National Information Technology Authority - Uganda funded by World Bank.
8. June 2018 to April 2019 - Development of a Strategy for Matching ICT Skills Supplied by Education Institutions and those needed by the Industry in Rwanda, funded by UNESCO-Eastern Africa.
9. 2018 - Development of ICT Accessibility and Disability Indicators: A framework for monitoring Obligatory National Implementation of ICT Accessibility for the Fulfillment of the Human Rights of Persons with Disabilities for the ICT Policy Centre for Eastern and Southern Africa (CIPESA), funded by CIPESA.
10. June 2017 – January 2018- Development of an Implementation Strategy of the Digital Talent Policy (DTP) for Persons with Disabilities in Rwanda, Funded by UNESCO-Eastern Africa.
11. May to September 2015- An Audit of Inclusive ICTs for Education in Uganda under a two-year project on Promoting the Rights of Persons with Disabilities' Access to Inclusive Education and Information in Uganda implemented in partnership with UNESCO, UNICEF, National Union of Disabled Persons in Uganda (NUDIPU) & and other public, NGOs and private sector.

Relevant Contributions/Services

1. Member of the drafting committee for the African Union continental AI Strategy:

[https://au.int/sites/default/files/documents/44004-doc-EN-Continental AI Strategy July 2024.pdf](https://au.int/sites/default/files/documents/44004-doc-EN-Continental_AI_Strategy_July_2024.pdf)

2. Executive member of the Data Economy Policy Hub:

<https://www.dataeconomypolicyhub.org/>

Supervision of Graduate Students

Student name	Level	Title of the thesis	Status (Graduated/In Progress)
Fridah Katushemererwe	PhD	Computational morphology and Bantu language learning. An implementation for Runyakitara	Graduated in 2013 from Groningen University, the Netherlands
Eilu Emmanuel	PhD	Anticipated user experience (Aux) framework for implementing electronic participation in a developing country context	Graduated in 2020
Mutungi Fredrick	PhD	A Model for Context-fitting Mobile Services for Monitoring the Delivery of Public Health Services	Graduating in 2024
Eva Mirembe	PhD	Leveraging Learning Analytics to	Implementing her proposal

		Enhance Teachers Support in an E-Learning Environment in Higher Education Institutions	
Michael Mweru	PhD	Towards Optimal data quality for law enforcement in the context of public Trust	Mid-way the proposal
Edmond Rukandema	PhD	Towards enhancing data use for better decision making in Higher Education Institutions in Uganda	Mid-way the proposal
Elizabeth Rwabu	Msc		Completed 2023
Agnes Kahwa	Msc		Completed 2023
Haguma Jimmy	Msc		Completed 2022
Edgar Kuhimbisa	Msc		Completed in 2020
Babirye Nubuwati	Msc		Completed 2017
Anjoga Humphrey	Msc		Completed in 2015
Henry Serugunda	Msc		Completed 2015
Moses Mugumya	Msc		Completed in 2015
Edrida Mugisha	Msc		Completed in 2012
Moses, Ajwang	Msc		Completed in 2012
Christopher Ntwatwa	Msc		Completed in 2012
Raymond Baziwane	Msc		Completed in 2010
Margaret Nagovuma	Msc		Completed in 2010
Ziria Babwona	PGD		Completed in 2006

Experience in Organizing and Facilitating Conferences/Workshops/Seminars

1. 2020-**Programe Committee Member** for the IFIP WG 9.4 European Conference on the Social Implications of Computers in Developing Countries.
2. 2017-2018-Chair **Chair Graduate Students Workshop** for the 7th International Conference on Mobile Communications Technology for Development (M4D 2018) held in University of Rwanda, Kigali, Rwanda from 27-29 April 2022
3. 2016-to-date- **Track Chair** for the Digital Culture and Inclusion Track for the Annual International Conference on Theory and Practice of Electronic Governance (ICEGOV).
4. 2017-2018-Chair **Local Organising Committee** for the 6th International Conference on Mobile Communications Technology for Development (M4D 2018) held in Makerere University, Kampala, Uganda from 15-16 November 2018.
5. 2016-2017- **Programme Committee Co-Chair** for the 10th International Conference on Theory and Practice of Electronic Governance (ICEGOV 2017) held in New Delhi, India in March 2017.
6. 2015-2016 **Co-chair for the Workshops Track** for the Inaugural African Conference for Human Computer Interaction (AfriCHI 2016) that was held in November 2016 in Nairobi, Kenya.

Selected Publications

1. Baguma, R. (2025). Use of Large Language Models in Public Administration in Africa: Benefits and Challenges (In press)

2. Baguma, R. & Nakatumba, J. (2025). Performance of Large Language Models in the African Context: Underlying Fairness and Ethical Factors (In press).
3. Baguma, R. (2024). Towards Integration and Data Sharing to Enhance Child Protection in Uganda. Proceedings of the 17th International Conference on Theory and Practice of Electronic Governance Page1s 414 – 424
4. Baguma, R. Nauwaya, H., Nakatumba, J. & Rashid, Q. M. (2024). **Examining Potential Harms of Large Language Models (LLMs) in Africa**", Volume 566 of the **Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering** series.
1. Baguma, R. Mkoba, E., Nahabwe, M., Mubangizi, M.G., Amutorine, M. & Wanyama, D. (2022). Towards an **AI Readiness Index for Africa**. Submitted to the 12th International Development Informatics Association Conference (IDIA 2022).
2. Baguma R. & Namubiru, P.S (2022). **Development of a Blended Course for continued Teaching and Learning during the Covid-19 Pandemic: Experience and Lessons**, Learning Design Voices (online Book): <https://learningdesignvoices.com/about/>
3. Namubiru, P. S., Ng'ambi, D. Bagarukayo, E., Baguma, R., Nabushawo, H. & Nalubowa, C. (2020). Enhancing Student Interactions in Online Learning: A Case of Using YouTube in a Distance Learning Module in a Higher Education Institution in Uganda. Higher Education Research, 2020; 103-116.
4. Baguma, R., Bagarukayo, E., Namubiru, P., Brown, C. & Mayisela, T. (2019). Using WhatsApp in Teaching to Develop Higher Order Thinking Skills-a Literature Review Using the Activity Theory Lens, International Journal of Education and Development using Information and and Communication Technology (IJEDICT)
5. Mutungi,F., Baguma, R. & Janowski,T. (2019). Towards Digital Anti-Corruption Typology for Public Service Delivery, DG.O 2019: 484-494.
6. Janowski, T., Estevez, E. & Baguma, R. (2018). Platform governance for sustainable development: Reshaping citizen-administration relationships in the digital age, Government Information Quarterly, Vol.35, issue 4.Tweheyo, R, Lubega, J.T & Baguma, R. (2018). A mobile Artifact for collecting and availing indigenous knowledge to farmers for food security enhancement. In the Proceedings of the 6th International Conference on Mobile Communication Technology for Development Conference (M4D) 2018, Makerere University, Kampala, Uganda.
7. Mutungi, F. & Baguma, R. (2018). Use of mobile technologies in monitoring delivery of public health services in Uganda. In Proceedings of M4D 2018, Makerere University, Kampala, Uganda.
8. Baguma, R. (2018). Usability Evaluation of the eTax Portal for Uganda. In Proceedings of the 11th International Conference on Theory and Practice of Electronic Governance, (ICEGOV2018), Galway, Ireland, 2018.
9. Kuhimbisa, E., Baguma, R. & Nakakawa, A. (2017). A Model for Developing Usable Integrated Information Systems: A case of the Criminal Justice Sector in Uganda; IFIP Advances in Information and Communication Technology book series (IFIPAICT, volume 504) Pages 617-628.
10. Bagarukayo, E., Ng'ambi, D., Baguma, R. & Namubiru, P.S. (2017). Using Facebook to Transfer Knowledge into Practice and Aid Student, Lecturer and Content Interaction - A Case of Bachelor of Information Technology Undergraduate Students at Makerere University. CSEDU (1) 2017: 402-410.
11. Baguma, R. (2017). An Audit of Inclusive ICTs for Education in Uganda. In Proceedings of ICEGOV 2017, New Delhi, India.
12. Eilu, E. & Baguma, R. (2017). Anticipated User Experience (AUX) Framework for Improving Acceptance of Using Mobile Phones for Voting in Developing Countries, 2016. In Proceedings of ICEGOV 2017, New Delhi, India.

13. Baguma, R. & Eilu, E. (2014). **Using Mobile Phones in Elections in Developing Countries: Opportunities and Challenges**, book chapter in Computing in Research and Development in Africa - Benefits, Trends, Challenges and Solutions".
14. Eilu, E., Baguma, R. & John Sören Pettersson (2014). **Persuasion and Acceptance of Mobile Phones as a Voting Tool in Developing Countries**. In Proceedings of the 4th M4D 2016, Dakar Senegal.
15. Eilu, E. and Baguma, R. (2013). Designing A reality fit M-voting. In Proceedings of the 7th I ICEGOV 2013, Seoul, Republic of Korea, October 2013. **Baguma, R., M.Myllyluoma, N.Mwakaba & B.Nakajubi (2013). "Usability and Utility Needs of Mobile Applications for Business Management among MSEs: A case of Myshop in Uganda. INTERACT 2013: 764-773.**
16. Baguma, R. (2013). **Mobile Money Services in Uganda: Design Gaps and Recommendations**. HCI 2013: 249-258.
17. Eilu, E. and Baguma R. (2012). **Bridging the User Experience Gap in Mobile Phone Voting in Developing Countries**. In Proceedings of the 8th Annual International Conference on Computing & ICT Research, ICCIR 12, Kampala, Uganda.
18. Alao, O.D., Awodele, O., Baguma, R. and Weide, Th.P. van der (2011). **Cultural Issues and their Relevance in Designing Usable Websites**. International Journal of Computer Science & Emerging Technologies, Issue Vol.1 No.2, February 2011.
19. Baguma, R., Stone, R., Lubega, J.T. and Weide, T. (2009). **Integrating Accessibility and Functional Requirements**. HCI International Series, Springer, ISBN: 978-3-642-02712-3, Vol. 5610, pp. 635-644

Full publications record available in Google Scholar at:

<https://scholar.google.com/citations?user=ZHidO2QAAAAJ&hl=en>

Languages

Language	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Runyankole-Rukiga & Luganda	Excellent	Excellent	Excellent
Swahili	Fair	Fair	Fair
Chinese	Fair	-	-

Referees

Prof. Th.P. van der Weide, tvdw@cs.ru.nl
 Information Retrieval and Information Systems Digital Security,
 Institute for Computing and Information Sciences,
 Radboud University, Nijmegen, the Netherlands
 Tel. +31-24-365 33 61.

Dr. Jude T. Lubega, judlub@gmail.com
 Vice Chancellor, Nkumba University.
 Tel: +256-774600884.

Certification

I, Rehema Baguma, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications and my experience.

Date: 4th April 2025