

CURRICULUM VITAE
PROF. FREDRICK MZEE AWUOR, PhD, PhD

CONTACT - ADDRESS	Kisii University, P.O. Box 408 40200 Kisii, Kenya
	Tel: +254(0)-799-214-843 Email: fawuor@kisiiversity.ac.ke Google Scholar: https://scholar.google.com/citations?user=W2UZbTIAAAAJ&hl=en&oi=ao ORCID: https://orcid.org/0000-0003-3623-4864 LinkedIn: https://www.linkedin.com/in/freadmzee/
RESEARCH INTERESTS	Human centered computing, social networks, wireless communication, game theory, network economics and incentive design mechanisms
ACADEMIC QUALIFICATIONS	Institute of Information Sciences, Academia Sinica & Department of Computer Science, National Chengchi University, Taipei, Taiwan Ph.D. Social Networks and Human Centered Computing (Jul 2018) <i>Thesis: Content Sharing in Mobile Social Networks</i>
	School of Informatics and Innovative Systems, Jaramogi Oginga Odinga University of Science and Technology, Bondo, Kenya Ph.D. Business Information Systems (May 2016) <i>Thesis: Towards Modeling and Building E-Agriculture Framework in Kenya</i>
	Conference Des Grandes Ecoles, France, and French South African Institute of Technology (F'SATI), Pretoria MSc. Electronics and Electrical Systems (Mar 2012)
	Tshwane University of Technology and French South African Institute of Technology (F'SATI), Pretoria, South Africa M.Tech. Electrical Engineering (Nov 2011) <i>Thesis: Joint Power and Rate Adaptation in Ad hoc Networks</i>
	Moi University, Eldoret, Kenya (Dec 2008) BSc. Computer Science , Second Class Honours (Upper Division)
	Jera Mixed Secondary School (Nov 2002) Kenya Certificate of Secondary Education (<i>Grade: A minus</i>)
PROFESSIONAL EXPERIENCE	Adjunct Researcher - African Institute for Capacity Development (AICAD), Nairobi, Kenya (Sept 2025 - to date) Responsibility: Carrying out joint research projects and publication with AICAD
	Associate Professor - Kisii University, Department of Computing Sciences, Kisii, Kenya (May 2023 - to date) Responsibilities: Shaping the technological landscape in Kenya through education, training and research: i. Educating/training students and guiding their academic growth; ii. Conducting research and publishing findings; iii. Managing programs and contributing to governance; iv. Collaborating with society and industry; v. Continuously learning and evolving; and

vi. Supporting peer review, conferences, and committees.

Senior Lecturer - Kisii University, Department of Computing Sciences, Kisii, Kenya
(Dec 2018 - Apr 2023)

Responsibilities:

- i. Delivering lectures, designing courses, and enhancing learning experiences;
 - ii. Conducting independent research, securing funding, and publishing in academic journals;
 - iii. Advising undergraduate, postgraduate, and doctoral students;
 - iv. Assessment and Quality Assurance;
 - v. Collaborating with industry, policymakers, and the community to apply research findings;
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Lecturer - Kisii University, Department of Computing Sciences, Kisii, Kenya

(Jul 2012 - Nov 2018)

Responsibilities:

- i. Teaching and Curriculum Delivery – designing and delivering lectures, seminars, and assessments;
 - ii. Research and Publications – conducting research and contributing to academic journals;
 - iii. Student Supervision and Support – advising and mentoring students at undergraduate and postgraduate levels;
 - iv. Academic Administration – contributing to module coordination and university governance
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Informatician - USAID/AMPATH Partnership - Moi Teaching and Referral Hospital, Eldoret, Kenya
(Jan 2009 to Feb 2010)

Responsibilities:

- i. Maintaining and supporting hospital EMR, HIS, and integration with national health databases;
 - ii. Overseeing IT infrastructure, ensure system uptime, and support telemedicine services;
 - iii. Implementing security measures, safeguard patient data, and ensure compliance with health data regulations;
 - iv. Supporting the deployment of digital health solutions, mHealth apps, and research projects and
 - v. Providing IT support, train healthcare staff, and develop user manuals for hospital systems.
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**ADMINISTRATION
AND
MANAGEMENT**

Ag. Deputy Vice-Chancellor (Administration, Planning, and Finance) -

Kisii University, Kisii – Kenya (Jul 2023 – Jan 2026)

Responsibilities and achievements: Advanced the delivery of the University's mission by providing strategic leadership in the administration, planning, and finance division:

- i. Spearheaded the development of 2024-2029 Kisii University Strategic Plan;
 - ii. Spearhead the formulation, negotiation, approval, implementation, monitoring and reporting of the Kisii University Performance Contracting for 2023/24, 2024/25 and 2025/26 Financial Years;
 - iii. Lead Kisii University beatification initiatives;
 - iv. Spearheaded the University budgeting, approval and implementation for the 2023/24, 2024/25 and 2025/26 Financial Years;
 - v. Lead the development and approval of various university policies including AI Policy, Building Naming Policy, Anti-corruption policy;
 - vi. Streamlined the adoption and integration of Huduma Bora ICT solution in University operations;
 - vii. Served as a Management Representation on Quality Management
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- viii. Representative on ISO 9001:2015 and ensured compliance to the standard;
 - ix. Member - Human Resources and Appointment Committee of Council;
 - x. Member - Planning, Finance, Development and General-Purpose Committee of Council;
 - xi. Member - University Senate;
 - xii. Secretary - University Management Board;
 - xiii. Chairperson - Budget and Resource Allocation Committee;
 - xiv. Quality Management Representative on ISO 9001:2015;
 - xv. Chairperson - Staff Disciplinary Committee (non-teaching staff below grade 12);
 - xvi. Chairperson - Space Allocation Committee;
 - xvii. Chairperson - University Risk Steering Committee;
 - xviii. Chairperson - Strategic Plan 2024 Review Committee;
 - xix. Chairperson - Strategic Plan Implementation Committee;
 - xx. Chairperson - Employees Productivity Mainstreaming Committee;
 - xxi. Chairperson - Performance Contracting Committee;
 - xxii. Chairperson - Information and Communication Technology Committee;
 - xxiii. Member - Appointments Committee;
 - xxiv. Member - Kisii University Statutes Review Committee;
 - xxv. Member - Appraisal, Training and Promotion Committee;
 - xxvi. Member - Scholarships and Bursaries Award Committee;
 - xxvii. Member - Graduation and Ceremonies Committee; and
 - xxviii. Member - Honorary Degree Award Committee
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Dean of School - School of Information Science and Technology, Kisii
University, Kisii – Kenya (Jan 2019 - to date)

Responsibilities and Achievements: Provided academic and administrative leadership in the school:

- i. Lead revision of curriculum in the school to align to the market demands and emerging dynamics;
 - ii. Improved the student numbers/enrollment by 600%;
 - iii. Lead the team the digital engagement team assisted the University to tell her stories and dominate the social networks;
 - iv. Member of University Senate;
 - v. Preparing, implementing and reviewing the School Strategic Plan;
 - vi. Convening the School Board meetings;
 - vii. Providing overall management of the school academic programmes
 - viii. Implementing the University policy decisions and regulations in respect to the school;
 - ix. Member of Deans' Committee;
 - x. Planning and coordinating the school budgetary estimates;
 - xi. Overseeing the work of the Chairpersons of Departments;
 - xii. Preparing and implementing the School Annual Work Plans, Performance
 - xiii. Contract and Procurement Plans;
 - xiv. Undertaking annual staff performance appraisal in the school
 - xv. Member of University Quality Assurance Committee;
 - xvi. Chairperson - Digital Engagement and Website Management Committee;
 - xvii. Chairperson - ERP External Audit Report Implementation Committee;
 - xviii. Chairperson - ICT Policy Review Committee;
 - xix. Member of E-learning Committee;
 - xx. Chairperson - ERP Inspection Committee;
 - xxi. Member of Students Disciplinary Committee; and
 - xxii. Member of Graduation Committee
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School Programmes Coordinator - School of Information Science and Technology,
Kisii University, Kisii – Kenya (July 2013 - Aug 2014)

	Responsibilities: - Co-ordinating development of new academic programmes in the school; - Co-ordinating revision of academic programmes in the school; - Linkage between the School and the Directorate of Academic Quality Assurance in the University.
	School Exams Coordinator - School of Information Science and Technology, Kisii University, Kisii – Kenya (Sept 2012 - Jun 2013) Responsibilities: - Receive and process exams in the school; - Receive and process exam booklets in the school; - Prepare reports on examination matters in the school; - Prepare exams for internal and external moderation; and - Manage the examination office and the exams
FUNDING ATTRACTED AS ASSOCIATE PROFESSOR	Integrating Responsible Computing in Computer Science Curriculum (July 2023 to Nov 2025) Funder: Mozilla Foundation on Responsible Computing Challenge Amount: \$ 62,500 Role: Principal Investigator Website: https://www.mozillafoundation.org/en/responsible-computing-challenge/awardees/
OTHER FUNDINGS ATTRACTED	Carbon Literacy for Youth Employability and Job Creation in sub-Saharan Africa (Oct. 2021 to Oct 2023) Funder: British Council on Innovation for African Universities Amount: GBP 159,000 Role: Co-Principal Investigator and Country Project Lead - Kenya Partners: Kisii Univ. (Kenya), Sheffield Hallam Univ. (UK), Durban Univ. of Tech. (S. Africa), Innovate Durban (S. Africa), and Ladoke Akintola Univ. of Tech. (Nigeria) https://www.britishcouncil.co.ke/programmes/education/innovation-african-universities/carbon-literacy-employability Exploring Carbon Literacy Levels among Smallholder Farmers in Kisii County (Apr 2022 to Aug 2022) Transforming Universities for a Changing Climate (ClimateU) Amount: GBP 10,000 Role: Co-Principal Investigator Website: https://www.climate-uni.com/kenya-team
PUBLICATIONS AS ASSOCIATE PROFESSOR	- Areba G.N., Gisore B. N., Njurai E. W., Awuor, F. M., & Ratmeo C. M. (Eds.). (2026). Transformative Leadership and Enhancing Equity in Technological Advancements in Higher Education. IGI Global. DOI: 10.4018/979-8-3373-2322-0. - Orucho, D.O., Awuor, F.M., & Oduor, C. (2025). Assessing Operation of Mobile Banking Applications that Support Customers to Access Banking Services Remotely. In: Mirzazadeh, A., Molamohamadi, Z., Babaei Tirkolaee, E., Weber, G.W., Leung, J. (eds) Optimization and Data Science in Industrial Engineering. ODSIE 2023. Communications in Computer and Information Science, vol 2205. Springer, Cham.
Books and Book-Chapters	
Journals	Awuor, F.M & Otanga, S. (2026). From awareness to practice: bridging the pedagogical translation gap in responsible computing education. Education and Learning in Developing Nations, (ELDN), 4(1): 70-75. https://eldn.com.my/eldn-01-2026-70-75/ Awuor, F.M. (2026). Integrating ethics in artificial intelligence syllabus in university and co-teaching with industry experts: Perceptions and experiences of students from Kenya. Journal of Advances in Computing and Engineering (ACE), 6(1). http://dx.doi.org/10.21622/ACE.2026.06.1.1906

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3. **Awuor, F.M.** (2026). Integrating responsible computing into a final-year project: A case study approach. *The Journal of Informatics*, 6(1).
<https://doi.org/10.59645/tji.v6i1.811>
 4. Alex, M., Ojo, S. O., & **Awuor, F. M.** (2025). Carbon-Aware, Energy-Efficient, and SLA-Compliant Virtual Machine Placement in Cloud Data Centers Using Deep Q-Networks and Agglomerative Clustering. *Computers*, 14(7), 280.
<https://doi.org/10.3390/computers14070280>
 5. Alex, M., Ojo, O. S., & **Awuor, F.** (2025). Energy-aware and carbon footprint optimization model for virtual machine placement in data centres – A systematic literature review. *International Journal of Computing Sciences Research*, 9, 3524-3548.
 6. Tacho, M., Namande, B., & **Awuor, M.** (2025). Influence of Records Creation and Capture Policy on Service Delivery at the County Government of Isiolo. *Journal of Applied Humanities and Social Sciences* ISSN 2791-1594, 4(1), 13–28.
 7. Ouma, G., **Awuor, M.**, Wamuyu, K. P., & Maake, B. (2024). Designing a Comprehensive Framework for Data and Network Security in Cloud Computing: Case of Kenyan Banking Industry. *African Journal of Emerging Issues*, 6(2), 24–45.
 8. Songol, M. K., **Awuor, F. M.**, & Maake, B. M. (2024). Usage of Mobile Phones for Crop Pest Surveillance in Kenya, Case of Uasin Gishu County. *Current Agriculture Research Journal*, 12(3).
 9. Ouma, G., **Awuor, F. M.**, Makiya, C. R., & Okanda, P. (2024). A Framework for Enhancing Adoption of Mobile-based Surveillance for Crop Pest and Disease Management by Farmers in Kenya. *Journal of Agricultural Informatics*, 15(1).
 10. Tenya, A. N., Maina, J. C., & **Awuor, F. M.** (2024). Digital Literacy as a Tool for Enhancing Access Utilization of Digital Information: A Case Study in Kenya. *Journal of Information and Knowledge*, 61(3), 2024, p.125-133. DOI: 10.17821/srels/2024/v61i3/171399.
 11. Ouma, G., **Awuor, M.**, Wamuyu, K. P., & Maake, B. (2024). Applicability of Cloud Security Frameworks and Models in the Kenyan-Banking Sector: A Review. *African Journal of Emerging Issues*, 6(9), 81–99.
 12. Tenya, A. N., Maina, J. C., & **Awuor, F. M.** (2024). Visual Design as the Impetus for Access and Utilization of Information in Digital Resource Platforms in University Libraries. *Open Access Library Journal*, 11(3), 1-22.
 13. Ouma, G., **Awuor, M.**, Wamuyu, K. P., & Maake, B. (2024). Designing A Comprehensive Framework for Data and Network Security in Cloud Computing: Case of Kenyan Banking Industry. *African Journal of Emerging Issues*, 6(2), 24 - 45.
 14. Tenya, A., Maina, J., & **Awuor, F.** (2023). Digital Resource Platforms Available for Teaching and Research in Selected Public Universities in Kenya. *Journal of Applied Humanities and Social Sciences – ISSN 2791-1594*, 2(1), 46-70.
 15. Tenya, A., Maina, J., & **Awuor, F.** (2023). Challenges in Accessing and Utilizing Information in Digital Resource Platforms by Academic Staff in Selected Public Universities in Kenya. *International Journal of Current Aspects*, Volume 7, Issue 2, 2023 PP 65-80.
 16. Ouma, G. O., Okanda, P., **Awuor, F. M.**, & Makiya, C. R. (2023). “Adopting Digital Solutions for Large Scale Surveillance of Crop Pests and Diseases in Developing Countries—A Review.” *Modern Sciences Journal*, 12(2).
 17. Shitandi, A. A., **Awuor, F.M.**, Maobe, A., Maake, B., Oyaro, E., & Marumbu E. (2023) Exploring the Carbon Literacy Levels among Smallholder Farmers in Kisii County. *Transforming Universities for a Changing Climate, Working Paper Series No. 15 - ISSN 2754-0308*.
 18. Ouma, G.O., **Awuor, F.M.**, Makiya, C.R. & Okanda, P. (2023). “Leveraging Mobile
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	Phones in Crop Pests and Disease Surveillance- Perspectives of Farmers in Kenya". Archives of Agriculture Research and Technology, 4:1051 19. Orucho, D. O., Awuor, F. M., Makiya, R., & Oduor, C. (2023). Review of Algorithms for Securing Data Transmission in Mobile Banking. Modern Economy, 14(9), 1192-1217. 20. Orucho, D.O., Awuor, F.M., Makiya, R. & Oduor, C. (2023). "An Enhanced Data Transmission in Mobile Banking Using LSB-AESAlgorithm". Asian Journal of Research in Computer Science, 16 (1), 43-56. 21. Orucho, D. O., Awuor, F. M., Ratemo, C., & Oduor, C. (2023). "Security threats affecting user-data on transit in mobile banking applications: A review." International Journal of Computer Engineering Research, 9(1), pp. 1-11
Conference Publications - as Associate Professor	1. Maraga A., Sunday O., & Awuor M., "Comparative Experimental Study of Energy and Carbon-Aware Metaheuristic Algorithms for Virtual Machine Placement in Cloud Data Centers". In the Proceedings of 9th IEEE ICTAS 2025, 23rd-25th July, 2025, Ballito, KZN, South Africa. 2. Omambia A., Awuor M., & Maake B. "An AI-Driven IoT Framework for Aquaculture Management". In the Proceedings IST-Africa, 28th-30th May, 2025, Nairobi. 3. Ochieng B., Onyango F., Kuria P., Wanjiru M., Maake B., & Awuor M. AI-Driven Carbon Emissions Tracking and Mitigation Model. In the Proceedings of IST-Africa Conference, May 2024, Pretoria. 4. Maake B. & Awuor F.M. "Responsible computing and ethical artificial intelligence CF2P pedagogical model". In the Proceedings of Data Science and Artificial Intelligence Conference, 2024, Kabarak University - Kenya, 6th - 9th Feb, 2024. 5. Maake B. & Awuor F.M. "Training ICT Undergraduate Students on Ethical Artificial Intelligence Towards realization of Industry 4.0". In the Proceedings of the Kisii University School of Business and Economics 1st International Conference, 2024, Kisii University - Kenya, 19th - 20th Sept 2023. 6. Orucho, D. O., Awuor, F. M., & Oduor, C. (2023, November). Assessing Operation of Mobile Banking Applications that Support Customers to Access Banking Services Remotely. In International Conference on Optimization and Data Science in Industrial Engineering (pp. 20-35). Cham: Springer Nature Switzerland.
Other Conferences Attended as Associate Professor	1. 6th Annual Management Representatives' and Auditors' Conference - 8th to 11th Dec., 2025. 2. 4th Regional Quality Conference by Kenya Bureau of Standards -18th to 21st Mar, 2025. 3. 5th Annual Management Representatives' and Auditors' Conference - 26th to 29th Nov, 2024.
OTHER PUBLICATIONS	1. Maake, A. O., Maake, B. M., & Awuor, F. M. (Eds.). (2020). Digital solutions and the case for Africa's sustainable development. Hershey: Information Science Reference (IGI Global).
Books and Book Chapters	2. Abenga, E. S. B., Okono, E. O., Awuor, F. M., & Otanga, S. (2021). Framework for Technology-Enriched Active Class Learning of Physics in Secondary Schools in Kenya. In Maake, A. O., Maake, B. M., & Awuor, F. M. (Eds.), Digital Solutions and the Case for Africa's Sustainable Development (pp. 131-151). IGI Global Scientific Publishing. 3. Awuor F.M., Khisa J.W., & Rambim D.A. (2015). Delivering Equitable and Quality Education to Remote Kenya Using ICT. In Sodhi S.I (Ed.), Emerging Issues and Prospects in African E-Government (pp. 108-117). Hershey, PA, USA: IGI Global. 4. Maake B.M, Oino N.N., & Awuor F.M. (2015). M-Powering: How Mobile Money (M-PESA) Services Promote Realization of a Digital Society in the Kenyan

Journals

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- Government. In Sodhi I.S. (Ed.), *Emerging Issues and Prospects in African E-Government* (pp. 97-107). Hershey, PA, USA: IGI Global.
5. **Awuor F.**, Djouani K., Kimutai K., & Rambim D. (2012). Link Adaptation in Ad Hoc Networks Based on Interference Minimization. In M.S. Obaidat, J.L. Sevillano & J. Filipe (Eds.), *Communications in Computer and Information Science* (pp. 492–502). Heidelberg: Springer.
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1. **Awuor, F. M.**, & Opa, B. (2022). "Monitoring of Encroachment of Wetlands in Kenya: A Digital Solution Through Participatory Approach". *International Journal of Humanities and Arts Computing*, 16 (2), 38–152.
 2. Tombe, R. **Awuor, F. M.**, & Viriri, S. (2022). "An Architecture for "Computing in Healthcare", *J. Ubiquitous Syst. Pervasive Networks*, 17(2): 83-90.
 3. **Awuor, F. M.**, & Rambim, D.A. (2022). "Adoption of ICT-in- Agriculture Innovations by Smallholder Farmers in Kenya", *Technology and Investment*, 13, 92-103.
 4. **Awuor, F. M.**, & Ireri, D. M. (2022). "E-Agriculture Framework to Improve Agricultural Productivity: Literature Review". *Modern Economy*, 13, 1126-1138.
 5. **Awuor, F. M.**, & Okono, E. (2022). "ICT Integration in Learning of Physics in Secondary Schools in Kenya: Systematic Literature Review." *Open Journal of Social Sciences*, 10, 421-461.
 6. Obunde, J. A., Wasike, J. & **Awuor, M.** (2022). "Records Management Policy in Enhancing Governance in Homa Bay County Headquarters, Kenya". *University of Dar es Salaam Library Journal*, 17 (1), 151-164.
 7. Obunde, J. A., Wasike, J. & **Awuor, M.** (2022). "Influence of Computerization of Records in Enhancing Governance in Homa Bay County Headquarters, Kenya". *European Journal of Mathematics and Computer Science*, 9 (1), 1-11.
 8. Wanja, L., Namande, B. W., & **Awuor, F. M.** (2022). "User Education Practices on Utilization of Electronic Resources at the Kenya Revenue Authority Library, Nairobi". *Technology and Investment*, 13(1), 20-36.
 9. Maraga, A., **Awuor, F. M.**, & Ogalo, J. (2022). "Model for Security Controls in Web Content Management System". *Journal of Internet and Information Systems*, 11(1), 1-12.
 10. Songol, M., **Awuor, F.**, & Maake, B. (2021). "Adoption of Artificial Intelligence in Agriculture in the Developing Nations: A Review" *Journal of Language, Technology & Entrepreneurship in Africa*, 12(2), 208-229.
 11. Maake, B., & **Awuor, F.** (2021). "A Bisociated Domain-Based Serendipitous Novelty-Recommendation Technique for Recommender Systems". *Journal of Language, Technology & Entrepreneurship in Africa*, 12(2), 81-87.
 12. Muraya, C., **Awuor, F.**, & Maake, B. (2021). "Fake Profile Identification on Online Social Networks". *Journal of Language, Technology & Entrepreneurship in Africa*, 12(2), 48-59.
 13. Ireri, D.M., **Awuor, F. M.**, Ogalo, J. & Nzuki, D. (2021). "E-agriculture Framework for Improving Agricultural Food Crop Productivity among the Smallholder Farmers in Rural Kenya". *Bulletin of the University of Agricultural Sciences & Veterinary Medicine Cluj-Napoca Agriculture*, 78(2).
 14. Mayende, C.N., **Awuor, F. M.**, & Namande, B. (2021). "Customer- Centric Service Provision in Academic Libraries in Universities: Systematic Literature Review". *Technology and Innovation*, 12(4), 217-239.
 15. Ireri, D.M, **Awuor, F.M.**, Ogalo, J. & Nzuki, D. (2021). "Role of ICT in the Dissemination and Access of Agricultural Information by Smallholder Farmers in South Eastern Kenya". *Acta Informatica Malaysia*, 5(1): 31-41.
 16. Maake, B.M., Ojo, S.O., Zuva K. & **Awuor, F.M.** (2021). "A Bisociated Research
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Paper Recommendation Model using BiSOLinkers". *International Journal on Advanced Science, Engineering, Information and Technology*, 12(1).

17. **Awuor, F.M.** & Otanga, S.A. (2019). "Farmer centered large scale e-surveillance and control of crop pests in Kenya". *Journal of Agricultural Informatics*, 10(1), 33-44.
18. **Awuor, F.**, Wang C-Y., Tsai, T., (2018). Motivating Content Sharing and Trustworthiness in Mobile Social Network. *IEEE Access*, volume 6, pages 28339 - 28355, May 2018.
19. **Awuor, F.**, Raburu, G., Onditi, A., & Rambim, D. (2016). Building E-Agriculture Framework in Kenya. *Journal of Agricultural Informatics*, 7(1), 75-93.
20. Kiptoo T.S., Kyambo B., & **Awuor, F.M.** (2014). Adoption MIS in middle level training institutions in Kenya. *Computer Science and Information Technology*, 2(3), 133-141.
21. Maake B. & **Awuor, F.M.** (2014). Application of M-Gov to provision of education for all in developing nations. *Journal of Computer Science and Information Technology*, 2(1), 40-44.
22. Metto S.K., **Awuor, F.M.**, Kogeda, P.O. & Kimeli K.V. (2014). Ethnocomputing: Using ICT to Preserve the Culture of the People of North-Rift Region of Kenya. *International Journal of Scientific Research in Knowledge*, 2(4), 199-207.
23. **Awuor F.M.**, Rabah K., & Kimeli K. (2013). E-Agriculture framework: Modelling stakeholders' competing and conflicting interests. *International Journal of Agricultural Policy and Research*, 1(6), 172-179.
24. **Awuor, F.M.**, Maake B.M., & Rabah K. (2013). Hindrance of ICT Adoption to Library Services in Higher Institution of Learning in Developing Countries. *Journal of Computer Science and Information Technology*, 1(4), 252-256.
25. Metto S.K., Kimeli K.V., & **Awuor F.M.** (2013). Mobile Number Portability: A Case Study of Kenya. *Technology and Investment*, 4(4), 255-260.
26. Ouma G.O., **Awuor F.M.**, & Kyambo B. (2013). E-Learning Readiness in Public Secondary Schools in Kenya. *European Journal of Open, Distance and E-Learning*, 16(2), 97-110.
27. Rotich G., Kyambo B., **Awuor F.M.**, & Obegi F. (2013). Effects of E-Learning System on Teacher Orientation Programs: A Case Study of Kenya Institute of Education. *World Journal of Computer Application and Technology*, 1(3), 83-88.
28. **Awuor F.M.**, Djouani K. and Noel G., "Joint Power and Rate Adaptation in Ad Hoc Networks Based on Coupled Interference", *Procedia Computer Science*, vol. 5, pp. 272 - 279, 2011.

Conference Proceedings

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1. Maake B. & **Awuor F. M.**, "A Bisociated Domain-based Serendipitous Recommendation Technique" In the Proceedings of Technology and Society Conference 2021, Nairobi – Kenya, 4 Nov, 2021.
 2. Muraya C.N., **Awuor F. M.**, & Maake B. "Fake Profile Identification on Online Social Networks" In the Proceedings of Technology and Society Conference 2021, Nairobi – Kenya, 4 Nov, 2021.
 3. Songol M., **Awuor F. M.**, & Maake B., "Adoption of Artificial Intelligence in Agriculture in Developing Nations: Review" In the Proceedings of Technology and Society Conference 2021, Nairobi – Kenya, 4 Nov, 2021.
 4. **Awuor F.M.** & Opa B., "Tackling Wetlands Encroachment with Technology in Kenya: A Participatory Approach" In Proceedings of National Conference on Wetlands & Water, Eldoret-Kenya, (12 - 14, May), 2021.
 5. **Awuor F.M.** "Towards Creating Transparency in Loyalty Payments in Music Streaming Platforms". In Proceedings of IST-Africa Conference and Exhibition 2020, Kampala, Uganda, (6 - 8, May), 2020.
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6. Rambim D.A. & **Awuor F.M.** "Blockchain based Milk Delivery Platform for Stallholder Dairy Farmers in Kenya: Enforcing Transparency and Fair Payment" In Proceedings of IST-Africa Conference and Exhibition 2020, Kampala, Uganda, (6 - 8, May), 2020.
 7. Rambim D.A., Ondulo J. & **Awuor F.M.** "Use of Participatory Approach to Determine Adoption of ICT Agricultural Services" In Proceedings of IST-Africa Conference and Exhibition 2020, Kampala, Uganda, (6 - 8, May), 2020.
 8. **Awuor F.M.**, Otanga S.A, Kankeu F.C.P., Rambim D.A. & Kimeli V." Context-Aware Instant Messenger for Lunch Invitation" In Proceedings of IEEE Africon 2019, Accra - Ghana, (25 - 27, Sept), 2019.
 9. **Awuor F.**, Otanga S., Kimeli V., Rambim D. & Abuya T., "e-Pest Surveillance: Large Scale Crop Pest Surveillance and Control". In Proceedings of IST-Africa Conference and Exhibition 2019, Nairobi, Kenya, May 2019.
 10. Okono E., **Awuor F.**, Abenga E., Kimeli V. & Otanga S., "Framework for Technology Enriched Active Class Learning of Physics in Secondary Schools in Kenya". In Proceedings of IST-Africa Conference and Exhibition 2019, Nairobi, Kenya, May 2019.
 11. Odoyo C., Maina J., Kimeli V., **Awuor F.** & Rambim D., "A Qualitative Approach to Understanding the Determinants of Mobile Phone Users' Intention to Use Mobile Payment Services". In Proceedings of IST-Africa Conference and Exhibition 2019, Nairobi, Kenya, May 2019.
 12. **Awuor F.**, "Content Pricing in Mobile Social Networks: a collective Bidding Approach". In Proceedings of the 5th Strathmore International Mathematics Conference (SIMC 2019), Strathmore University - Nairobi, Apr 2019.
 13. **Awuor F.M.**, Wang C-Y, & T-C. Tsai., "Motivating Content Sharing in Mobile Social Network through Collective Bidding". In Proceedings of IEEE WCNC 2018, Barcelona, Spain, Apr 2018.
 14. **Awuor F.M.**, & Wang C-Y., "Massive Machine Type Communication in Cellular System: A Distributed Queue Approach". In Proceedings of IEEE ICC 2016 workshop and symposium. 2016.
 15. Rambim D., Ogara S., Liyala S., & **Awuor F.**, "Towards an integrated framework for rural development in Kenya". In Proceedings of IST-Africa Conference and Exhibition, Durban, (IST-Africa). 2016.
 16. **Awuor F.M.**, & Rambim D., "ICT4D: A Survey of ICT-in-Agriculture in Kenya and other Africa Nations". In Proceedings of the 9th Conference of the Asian Federation for Information Technology in Agriculture "ICTs for future Economic and Sustainable Agricultural Systems", Perth, Western Australia. 2014.
 17. **Awuor F.M.**, Rabah K., & Maake B.M., "ICT in Technical Training to Address Unemployment in Kenya". In Proceedings of the Joint International Conference on Engineering Education and Research, and International Conference on Information Technology ICEE/ICIT 2013, Capetown, S.Africa, 2013.
 18. **Awuor F.**, Kimeli K., Kefah R., & Rambim D., "ICT solution architecture for e-Agriculture". In Proceedings of the IST-Africa Conference and Exhibition (IST-Africa), Nairobi. 2013.
 19. **Awuor F.**, Djouani K. and Noel G., "Distributed joint power and rate adaptation in ad hoc networks, "In Proceedings of WINSYS International Conference on Wireless Information Networks and Systems, Seville - Spain (18-21 Jul), 2011. (**WYNSIS 2011 Student Best Paper Award**).
 20. **Awuor F.M.**, Djouani K. and Noel G., "Joint power and rate adaptation in ad hoc networks based on coupled interference," In Proceedings of The 2nd International Conference on Ambient Systems, Networks and Technologies (ANT-2011) / The 8th
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	International Conference on Mobile Web Information Systems (MobiWIS 2011), Niagara Falls, Ontario - Canada (19 - 21 Sept), 2011. 21. Awuor F., Djouani K., Noel G., Olwal T. and Leclair P., "Coupled interference-based rate adaptation in ad hoc networks," In Proceedings of the IEEE Africon 2011, Lusaka - Zambia (13 - 15 Sept), 2011. 22. Awuor F.M., Djouani K., Noel G. and Olwal T., "Rate Adaptation in Ad Hoc Networks Based on Pricing," In Proceedings of Southern Africa Telecommunication Networks and Applications Conference, East London - S. Africa (4 - 7 Sept), 2011.	
CONSULTANCY AS ASSOCIATE PROFESSOR	Organization: COLEAD Jan 2026 - Dec 2028 Assignment: Support for strengthening the competitiveness of the agrifood sector - with particular emphasis on the horticultural sector in ACP countries - and compliance with the regulatory and private requirements of national, regional and international markets through training and technical assistance in business management and sustainable commercial and social practices. Organization: COLEAD Jan 2023 – Dec 2026 Assignment: Support to strengthen the competitiveness of the African, Caribbean, and Pacific (ACP) horticulture sector and compliance with the regulatory and private requirements of national, regional, and international markets through training and technical assistance in the areas of SPS, agricultural production or processing, and environmental management.	
OTHER CONSULTANCIES	Organization: COLEAD Jan 2020 - Dec 2023 Assignment: Digital content development and training – strengthening competitiveness and sustainability of the ACP horticultural sector in pest survey and surveillance of national pest protection organizations and in the organization of official control. Organization: African Technology Policy Studies Network Reviewer for expression of interests and proposals for AI - Food Systems Innovation in Africa Mar to Jul 2022	
START-UP (As Associate Professor)	1. Tuliamind: AI Powered Mental Support Health Platform Jan 2025 Role: Co-founder Webapp: https://app.tuliamind.com Google App store: https://shorturl.at/U4wPN 2. Responsible Computing Society Mar 2024 Description: Community of practice on human centric and responsible computing in Kenya Role: Founding Chairman Date: 2024	
COPYRIGHTS OWNED (as Associate Prof)	Tuliamind: AI Powered Mental Support Health Platform - Number RZ84331 - by Kenya Copyright Board Sep 2025	
COURSES TAUGHT	1. Postgraduate - Human-Centered Computing - Responsible and Ethical Computing - Advanced Data Communications and Networking - Advanced Artificial Intelligence Programming - Pattern Recognition and Machine Learning - Advanced Multimedia and Graphics - Data Mining and Information Retrieval 2. Undergraduate - Human Computer Interaction/Interface - Optimization Methods in Computing - Artificial Intelligence and Machine Learning Algorithms - IoT and Big Data Programming	

	v. Concurrent and Distributed Systems vi. Cryptocurrency and Blockchain Technology vii. Simulation and Modelling viii. Multimedia Systems ix. Network Design & Management x. Network Programming xi. Computer Architecture and Organization xii. Design and Analysis of Algorithms xiii. System Analysis and Design xiv. Computer Science Capstone Project
AWARDS	USAID Feed the Nation FAW Tech Prize Challenge in East Africa Award Value: \$5,000 Nov 2018 Project: Dicult: AI app for large scale pest surveillance. Website: https://fallarmywormtech.challenges.org/finalists-2/
MEMBERSHIP TO PROFESSIONAL ASSOCIATION	1. Internet Society -M/No.: 2300731 2. Association for Information Systems -M/No.: 70338162. 3. Institute of Electrical and Electronics Engineers - M/No.: 92696256. 4. Innovation for African Universities Community of Practice (IAUCoP) Academic. 5. Responsible Computing Society – Kenya
COMMUNITY SERVICE	1. Chairman – BoM of Anyiko Secondary School Jan 2025 to date 2. Member of Data Ethics Task Group of the Committee on Data for Science and Technology (CODATA) Jan 2023 - 2025 3. Reviewer for Computers and Education Open 2023 - to date 4. Reviewer for Online Learning Journal Jan 2023 - to date 5. Reviewer for IEEE PES/IAS Power Africa Conference 2020 -2022 6. Member of IEEE Social Networks Technical Committee 2019 – 2025 7. Reviewer for IEEE AFRICON 2021 Track on Communications and Networks 8. Reviewer for IEEE International Conference on Electrical, Computer, Communications, and Mechatronics Engineering 2021 9. Reviewer for IEEE Sensors Conference 2019 10. Reviewer for Egyptian Journal of Informatics 2019 to date 11. Board Member - Kenya Huawei ICT Academy Feb 2019 to Jan 2023 12. Reviewer for International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies 2017 to 2024 13. Reviewer for Journal of Global Information Management 2016 to 2020 14. Reviewer for IEEE EmergiTech 2016 15. Reviewer for IEEE AFRICON 2019 Technical Track on Computational Intelligence and Session Chair 2019 16. Reviewer for IEEE International Conference on Communications and Session Chair 2016
LINKAGES	1. MoU between Kisii University and National Taiwan University of Science and Technology 2021 2. MoU between Kisii University and Sheffield Hallam University 2021 3. MoU between Kisii University and Duban University of Technology 2021
CONTINUOUS PROFESSIONAL DEVELOPMENT (As Associate Professor)	1. Global MOOC on the Ethics of AI by UNESCO - LG AI Research through Coursera (Sept 9, 2026) 2. ISO 31000:2018 Risk Management Course (Nov 24 - 28 2025) by Kenya Bureau of Standards 3. How to Manage Data and AI Responsibly (April 18, 2025) by datocracy.ai 4. Research Communication for Policy Engagement (Oct 16, 2024) by International Network for the Availability of Scientific Publications (INASP) 5. Strategic Leadership Development Program (May to June 2024) by Kenya School of Government. 6. Promoting Responsible Gambling through AI (May 15, 2024) by the International

	Center for Responsible Gaming (ICRG)
	7. Data Protection (Mar 2024) by the Center for Intellectual Property and Information Technology Law - Strathmore University.
	8. Fostering Human Progress through Open Research (Jul 2023) by The Association of African Universities.
KEYNOTE SPEECH	1. Investing in Mental Health: Innovation and Digitization for a Sustainable Future at the 15th Annual International Research Conference – Kabarak University (October 15-17, 2025) https://lnkd.in/dD9miCc9 2. Embracing Digital Transformation in Health Professions Education at the 3rd Annual Health Professions Education Conference – Maseno University (April 23–25, 2025). https://www.maseno.ac.ke/3rdannual-health-professions 3. Science and Technology and Innovations Workshop at Mama Ngina University College (Dec. 11th, 2023)
PUBLIC LECTURE	Ethics and Bias in Artificial Intelligence: Equal Access at South Eastern Kenya University on 3rd Dec, 2021
PARTICIPATION IN WORKSHOPS	1. Discussant at the 2026 DataScientia International Academic Workshop at Durban University of Technology, S. Africa, 22nd – 25th July, 2026. https://tinyurl.com/4drp7vs4 2. Facilitator at the Regional International Study of Teachers and Teaching (ISATT) Pre-Conference Workshop on Responsible Use of AI in Research, Teaching and Learning at Maseno University on 28th June, 2026. 3. Discussant at the African Compute Initiative (ACI) Inception Workshop in Cape Town on 7th and 8th May, 2026 organized by AI for Development Funders Collaborative (IDRC, Gates Foundation, FCDO and GIZ) + Mozilla Foundation. 4. Speaker at the Research Workshop on Intelligent Technologies for Health, Cities and Mobility on Human-Centered AI for Mental Wellbeing Africa at Strathmore University (22nd–23rd April 2026) 5. Discussant at the EQUAL Compute Network Workshop in Kigali on 1st April 2025 organized by Mozilla Foundation, IDRC and Bill Gates Foundation 6. Discussant at the Building Equitable Partnerships Toolkit Workshop in Accra on 10th and 11th March 2025 organized by British Council 7. Speaker at the ASSEK Annual Conference & Innovation Awards Gala-2024 in Nairobi on 3th and 4th Dec. 2024 organized by Association of Startup & SMEs Enablers of Kenya (ASSEK) 8. Speaker at the Responsible Computing for Sustainable Futures at Kumarakom - Kottayam on 22nd and 23rd Oct. 2024 organized by USAID and Mozilla Foundation 9. Speaker at the Getting started with E-Learning (virtually) on 30th Nov. 2023 organized by COLEAD - Fit for Market plus 10. Speaker on Leveraging on Academic-Industry Linkages to Foster Sustainable Innovations at the 2nd KCA University Innovation Week and Industry Summit on 20th Oct. 2023 11. Discussant and Facilitator at the Carbon Literacy for Green Innovation and Entrepreneurship Curriculum Development Workshop at Venue: Durban University of Technology on 24th to 28th Jul. 2023 organized by British Council on Innovation for Africa Universities 12. Discussant and Facilitator at the Implementing Sustainable Development Goals through Project-Based Integrated STEM Teaching Workshop (virtually) on 23rd Mar. 2022 organized by Kisii University, National Taiwan University of Science and Technology, Maseno University and DeKUT 13. Speaker at the Unlocking the Potential of Big Data Workshop in Nairobi on 16th Aug. 2019 organized by Nakala Analytics
POSTGRADUATE STUDENTS'	1. PhD Students i. 22383405: Energy-Aware Optimization Model for Virtual Machine Placement in

SUPERVISION	Cloud Data Centers Using a Hybrid Gradient-Based and Marine Predators Algorithm for Carbon Footprint Reduction. PhD in Information Technology - Durban University of Technology, S. Africa Sept. 2026
As Associate Professor	ii. DIS/20070/15: Influences of Organizational Characteristics on Cloud Computing Adoption by Banking Industry in Kenya. PhD in Information Systems - Kisii University. Dec 2026 iii. DIS/20022/14: An Integrated Crop Pest and Disease E-Surveillance Model for Smallholder Farmers. PhD in Information Systems – Kisii University. Dec 2025 iv. DIS10/20256/15: Information Access and Utilization in Digital Resource Platforms by Academic Staff in Selected Public Universities in Kenya. PhD in Information Science - Kisii University. Dec 2024 v. DIS10/00001/18: Privacy Preservation in Online and Mobile Banking. PhD in Information Systems - Kisii University. Dec 2024
	2. Master Students
	i. MIN11/20880/16: Assessment of Health Records Management Policies in Support of Service Delivery in County Hospitals: A Case of Isiolo County Hospital. Master of Information Science - Kisii University. Dec 2026 ii. MIN14/20178/13: Building a Machine Learning Algorithm for Crop Pest Surveillance among Smallholder Farmers in Kenya, Case of Uasin Gishu County. Master of Information Systems - Kisii University. Dec 2025 iii. MIN11/00012/18: User Education Practices on Utilization of Electronic Resources at the Kenya Revenue Authority Library, Nairobi. Master of Information Science - Kisii University. Dec 2024
OTHER POSTGRADUATE STUDENTS' SUPERVISIONS	1. PhD Students
	i. DIS/20038/14: E-Agriculture Framework for Improving Productivity among Smallholder Farmers in Kenya: Case of South Eastern Kenya. PhD in Information Systems – Kisii University. Dec 2022
	2. Master Students
	i. MIN11/00001/18: A Framework for Customer Centric Service Delivery in Academic Libraries: Case of UoN CEES Library. Master of Information Science - Kisii University. Dec 2022 ii. MIN11/20868/16: Records Management as the Basis of Enhancing Governance: A Case Study of Homa Bay County Headquarters, Kenya. Master of Information Science - Kisii University. Dec. 2022 iii. MIN12/20667/15: Model for Security Controls in Web Content Management System. Master of Information Systems - Kisii University. Dec. 2021 iv. MIN11/20366/14: Effects of Knowledge Management Strategies on Performance in Special Library in Trans-Nzoia County, Kenya. Master of Information Science - Kisii University. Dec. 2021 v. Mr. Laurence Siele: Rapid application development framework for e-government adoption in Kenya. Master of Information Systems - Kisii University. Dec. 2025 vi. MIN14/20008/11: Level of E-Learning Implementation Readiness in Public Secondary Schools: A Study of Rachuonyo North and South Districts, Kenya. Master of Information Systems – Kisii University. Dec. 2013 vii. Mr. Gordon Awuonda: Evaluation of the Change-over Process of Operating Systems on Users' Performance: A Case of Kisii University. Master of Information Systems - Kisii University. Dec. 2013
EXTERNAL EXAMINER	i. Department of Mathematics, Statistics and Computing - Rongo University. October 2024 to date. ii. Department of Mathematics and Computer Science - University of Eldoret. October 2024 to date. iii. School of Computing and Informatics - Masinde Muliro University of Science and Technology. July 2024 to date.

	iv. Department of Informatics - Namibia University of Science and Technology, January 2024 to date	
	v. Department of Information Technology - Kaimosi Friends University. October 2022 to date.	
CURRICULUM DEVELOPMENT	i. BSc. Computer Security & Forensics (Program Leader)	Jul 2025
	ii. BSc. Information Technology	Jul 2015
REFEREES	Prof. Dr. Nathan O. Ogechi, Vice Chancellor, Kisii University. P.O. Box 408 - 40200 Kisii, Kenya. Phone: 254-726-297-952 E-mail: nogechi@kisiuniversity.ac.ke or ogechinathan@yahoo.com Pst. Patric Kiprop, Deputy Senior Pastor – Christ Is The Answer Ministries (CITAM) - Kisumu. Tel: +254-721-269-574 Prof. Alfred Anakalo Shitandi, Ph.D., Professor - School of Pure and Applied Sciences, Kisii University. P.O. Box 408 - 40200 Kisii, Kenya. Phone: +254-722-153-494. E-mail: ashitandi@kisiuniversity.ac.ke or ashitandi@gmail.com Bernard Opaa, Deputy Director - Natural Resources and Environment, National Land Commission - Nairobi, Kenya. Phone: +254-720-563-430 Email: benopaa@gmail.com	