BACKGROUND INFORMATION



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PERSONALADDRESS: OFFICIAL ADDRESS:

P. O. Box 1991-040200, Kisii P.O Box 444-



RESIDENCE:

01030, Gatundu Kenyan

Milimani, Kisii County



GENDER: DATE OF BIRTH: MARITAL STATUS: Male February 10, 1983 Married with four children



Dr. Ratemo Makiya Cyprian, PhD PhD | MSc | MPhil | BSc | CCNA

SUMMARY OF ACCOMPLISHMENTS

Education

PhD IT, MSc QRM, MPhil IT, BSc CS&E, KCSE (83 Points), KCPE (488 Marks)

Teaching Experience Over eighteen (18) years of experience in various roles including; Senior Lecturer - Grade 13, Lecturer- Grade 12, Tutorial Fellow - Grade 11, Laboratory Demonstrator - Grade 8.

Administrative Responsibilities Over (fifteen) 15 cumulative years of academic administrative experience as Ag. Dean, Chair of Department, CISCO Center Academy Manager, Campus Coordinator and Coordinator of Industrial Attachment

Other Administrative Roles Served for over fifteen (15) cumulative years of other experience as Director ICT, Director ODeL, Director E-Learning, Campus Coordinator, Postgraduate Coordinator, Attachment and Field Trips Coordinator, Business Intelligence Analyst, Data analyst, ICT trainer and Editor

Publications

Published over thirty (30) publications in refereed journals

Funding

Won over Seven Million Kenya Shillings (Kes 7,000,000) in research grants

Postgraduate Supervision

Participated in over fifteen (15) PhD and Masters students supervised to completion

Theses

Examination

Examined over fifteen (15) PhD and Masters theses

Conferences

Participated in over fifteen (15) conferences attended as an organizer, panelist and presenter

Workshops

Participated in over fifteen (15) workshops/seminars as an organizer, panelist or presenter

Exhibitions

Participated in over fifteen (15) exhibitions as an organizer, panelist or presenter

Consultancies

Over fifteen (15) consultancies in the deployment of ICT infrastructure

Communities

Two (2) memberships (communities of practice)

Certifications

Over ten (10) certifications

Recognition

Three (3) awards

UNIVERSITY-LEVEL EDUCATION

PhD Information Kibabii University,

Technology January 2014 - December 2017

Thesis: Update of the DeLone and McLean's Information System Success Models to

Focus on Mobile Instant Messaging

MSc Quantitative Maseno University,

Research Methods January 2011 - December 2014

Project: Sustainable use of Business Intelligence Tools in the Soft Drinks Industry

MPhil Information Moi University,

Sciences (IT September 2007 - December 2011

Option) Thesis: Adoption and Use of Enterprise Reporting Systems at Kisii Bottlers Limited

BSc Computer Maseno University,

Science and January 2002 - December 2006

Engineering Classification: Second Class Honors Upper Division

CURRENT EMPLOYMENT

A. KENYATTA UNIVERSITY - MAMA NGINA UNIVERSITY COLLEGE

1. Dean, School of Pure and Applied Sciences

January 2023 -To Date

Leading research and teaching of various postgraduate and undergraduate programs in the School of Pure and Applied Sciences

2. Chair, Department of Computing and Information Technology

August 2023 - May 2024

Leading research, and teaching of various postgraduate and undergraduate programs in the Department of Computing and Information Technology

3. CISCO Networking Academy Manager and CCNA Instructor

September 2023 -To Date

Leading the Academy and teaching and examining the following CCNA courses offered by the School of Pure and Applied Sciences.

4. Senior Lecturer - Computing and Information Technology

August 2023 -To Date

Research, teaching and examining various postgraduate and undergraduate units in the department of Computing and Information Technology.

5. Chairperson of University Committees

September 2023 -To Date

- i. ICT Committee (Chairperson)
- ii. ERP Contract Implementation Committee (Chairperson)
- iii. Open, Distance and E-Learning Committee (Chairperson)
- IV. Enhancing MNUC Niche on Digital Technology and Primary Healthcare (Chairperson)
- V. University Disposal Committee FY 2024/2025 (Chairperson)
- vi. KIEP-SKIES Grant Implementation Committee Focal Person/Principal Investigator
- vii. Cultural Week Committee (Chairperson)

6. Member of University Committees

September 2023 -To Date

- i. Science Technology and Innovation Committee (Member)
- ii. MNUC Productivity Mainstreaming Committee (Member)
- iii. MNUC Grant Writing Championship Committee (Member)
- IV. Training Committee (Member)

- V. Mentorship Committee (Member)
- Vi. Evaluation Committee ERP Hosting Infrastructure Hardware and Software (Member)
- VII. Library Management and ICT Committee (Member)
- VIII. Deans Committee (Member)

PAST WORK EXPERIENCE

A. KARATINA UNIVERSITY

1. Director, ICT

December 2022 - August 2023

Directing establishment, institutionalization and provision of ICT services to all internal and external stakeholders of the University.

2. Director, Open Distance & E-Learning (Acting)

Various dates between December 2022 and August 2023

Leading integration of the ICT in teaching and learning across the University.

3. Senior Lecturer - Computer Science & Informatics

September 2022 - August 2023

Research, teaching and examining various postgraduate and undergraduate units in the department of Computing and Informatics.

4. Chair of University Committees

September 2023 -To August 2023

Network Expansion Inspection and Acceptance Committee

5. Member of University Committees

September 2023 -To August 2023

- i. International Conference on Climate Changes
- ii. ODeL Committee
- iii. Network Expansion Contract Evaluation Committee

B. KISII UNIVERSITY

1. Director, E-Learning

March 2019 - November 2022

Establishing and directing implementation of eLearning in the University. Integrating emergent technologies in teaching and learning in the University

2. Lecturer - Department of Computing Sciences, School of Information Science & Technology

February 2019 - November 2022

Research, teaching and examining various postgraduate and undergraduate units under the following programs offered by the School of Information Science and Technology.

3. Chair of University Committees

September 2023 -To August 2023

- ERP Inspection and Acceptance Committee (Chairperson)
- ii. University Network Working Group (Chairperson)

4. Member of University Committees

September 2023 -To August 2023

- i. E-Learning Committee (Secretary)
- ii. Website and Digital Engagement Committee (Member)
- iii. Job Description Committee (Member)

A. MASENO UNIVERSITY

1. Lecturer - School of Computing and Informatics

December 2017 - To March 2019

Research, teaching and examining various postgraduate and undergraduate units under the following programs offered by the School of Computing and Informatics.

2. Kisumu, Homabay and E-Campus Programs Coordinator

April 2015 - December 2016

Performing duties on behalf of the Dean in regard to programs offered by the School of Computing and Informatics and other duties assigned by the Directors of campuses.

3. CCNA Instructor - School of Computing and Informatics

September 2009 - To March 2019

Teaching and examining the following CCNA courses offered by the School of Computing and Informatics; IT Essentials - PC Hardware and Software, CCNA I - Network

Fundamentals, CCNA II - Routing Protocols and Concepts, CCNA III - LAN Switching and Wireless, CCNA IV - Accessing the WAN

4. Performance Contracting Representative - Kisumu City Campus

April 2015 - December 2016

Providing leadership in the execution of performance contract between the Principal Kisumu City Campus and The Vice Chancellor Maseno University. Regular review of items of the contract for the specific units under Kisumu City Campus

5. Coordinator of Industrial Attachment and Field Trips - School of Computing and Informatics

March 2012 - April 2015

Planning and overseeing academic field trip visits, Planning and managing industrial attachment exercises and initiating and maintaining linkages with the ICT industry

6. Tutorial Fellow - School of Computing and Informatics

March 2012 - December 2017

Teaching and examining units under the programs, offered by the school of computing and informatics.

7. Computer Laboratory Demonstrator

September 2008 - March 2012

Tutoring in the computer laboratories, and assisting in the preparation and revision of laboratory training manuals for laboratory-based courses ii. Assisting in conducting lectures and assessments for lab-related courses

B. G7 SYSTEMS LIMITED

1. Business Intelligence Analyst

January 2007 - August 2008

Standards development for reports using Actuate and BIRT reporting tools, projects co-ordination and computer maintenance (network infrastructure, computer hardware and software)

2. Data Analyst

October 2006 - January 2007

Enterprise Reporting using Actuate, database Systems design and management, network installation and maintenance, computer hardware and software installation and maintenance

C. ST. PATRICK'S SECONDARY SCHOOL - CP. MOSOCHO

1. Computer Technician and Editor

January 2000 - December 2002

ICT Trainer, computer hardware maintenance, publication of the congregation's Shirikisho Magazine

2. Computer Technician and Instructor

January 2000 - December 2002

Installation and maintenance of computer hardware/software and teaching Computer Studies and

Physics

3. Project Coordinator (Via Africa Foundation Project)

January 2005 - December 2005

Co-ordination of assembly of computers, co-ordination of installation of computer networks at selected secondary schools in Kisii region.

D. COCA COLA - KISII BOTTLERS LIMITED

ICT Intern

January 2006 - April 2006

Network infrastructure, computer hardware/software maintenance and requirements definition for Cooler Management System.

PUBLISHED WORK IN PEER REVIEWED JOURNALS |

- Kibuthi J. Kabiru, Ratemo C. Makiya, Anduvare, E.M. Evaluating the Performance of Tree-Based Predictive Models as Programme Recommenders for University Entrants in Kenya. African Journal of Education, Science and Technology. ISSN:2309-9240. <u>Final Draft on the Publication - ratemo.cyprian@mnu.ac.ke - Mama Ngina University college Mail (google.com)</u>
- 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). https://doi.org/10.57184/msj.v12i2.37
- 3. Josiah M. M., Samuel M., Makiya C. R. Record Management Practices and Service Delivery in Devolved System of Governance of Mavoko Sub-County, Machakos County Kenya. International Journal of Research and Innovation in Social Science (IJRISS). ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VII | Issue XI | November 2023. https://www.rsisinternational.org/journals/ijriss/Digital-Library/volume-7-issue-11/152-166.pdf
- OUKOH B., Ronald T., Makiya, C. R. Smart-Contract Based Framework for Online Pharmacy Product Anti-counterfeiting. International Journal of Computer Applications Technology and Research. Volume 12-Issue 10, 18 - 23, 2023, ISSN:-2319-8656. DOI:10.7753/IJCATR1210.1003. https://ijcat.com/archieve/volume12/issue10/ijcatr12101003.pdf
- Orucho, D. O., Awuor, F. M., Makiya, R., & Oduor, C. (2023). Security threats affecting user-data on transit in mobile banking applications: A review. International Journal of Computer Engineering Research. Vol. 9(1), pp. 1-11, July-December, 2023 DOI: 10.5897/IJCER2023.0304 Article Number: 0B513B771288 ISSN: 2141-6494. https://academicjournals.org/journal/IJCER/article-full-text-pdf/0B513B771288
- 6. Orucho, D. O., Awuor, F. M., Makiya, R., & Oduor, C. (2023). Review of Algorithms for Securing Data Transmission in Mobile Banking. Modern Economy, 14, 1192–1217. https://www.scirp.org/pdf/me_2023091416414423.pdf
- Ouma, G. O., Okanda, P., Awuor, F. M., & Makiya, C. R. (2023). Leveraging Mobile Phones in Crop Pests and Disease Surveillance - Perspectives of Farmers in Kenya. Corpus Publishers. Archives of Agriculture Research and Technology (AART). ISSN: 2832-8639 Volume 4 Issue 2, 2023. https://www.corpuspublishers.com/assets/articles/aart-v4-23-1051.pdf
- 8. Orucho , D. O., Awuor , F. M., Makiya , R., & Oduor , C. (2023). An Enhanced Data Transmission in Mobile Banking Using LSB-AES Algorithm. Asian Journal of Research in Computer Science, 16(1), 43-56. https://doi.org/10.9734/ajrcos/2023/v16i1334 View of An Enhanced Data Transmission in Mobile Banking Using LSB-AES Algorithm (journalajrcos.com)
- Koech Charles, Ratemo Makiya, Integrated Financial Management Information System in County Treasuries in Kenya: Empirical Analysis of the Implementation. International Journal of Innovative Science and Research Technology ISSN No:-2456-2165. Volume 8, Issue 5, May - 2023. https://ijisrt.com/assets/upload/files/IJISRT23MAY925.pdf
- Richard Kayanga Nyakundi, Prof. Samuel Mbuguah, Dr. Ratemo Makiya. Determination of User Factor Requirements for Acceptable of Biometric Voter Registration Technology. Journal of Computer Engineering and Information Technology. Volume 11 • Issue 5 • 1000230, June 2022. https://www.scitechnol.com/peer-review/determination-of-user-factor-requirements-for-acceptable-of-biometric-voter-registration-technology-4NnE.pdf
- Richard Kayanga Nyakundi, Prof. Samuel Mbuguah, Dr. Ratemo Makiya. A Model for Analyzing Usage Factors in Designing User Acceptance of Biometric Voter Registration Technology. International Journal of Engineering and Applied Sciences (IJEAS) ISSN: 2394-3661, Volume-8, Issue-12, December 2021. https://www.ijeas.org/download_data/IJEAS0812007.pdf
- 12. Nicholas. J. Omumbo, Titus. M. Muhambe, Cyprian M. Ratemo. Evaluation of Routing Performance using OSPF and Multi-Controller Based Network Architecture. International Journal of Computer

- Network and Information Security (IJCNIS), Vol.13, No.4, pp.45-61, 2021. DOI: 10.5815/ijcnis.2021.04.05. http://www.mecs-press.org/ijcnis/ijcnis-v13-n4/IJCNIS-V13-N4-5.pdf
- Oonge S. Omboga, Muhambe T. Mukisa & Ratemo M. Cyprian. A Bring Your Own Device Risk Assessment Model. International Journal of Security (IJS), Volume (12): Issue (2), ISSN: 1985-2320, https://www.cscjournals.org/journals/IJS/description.php.
- 14. Musau Victor Vincent, Dr. Ratemo Makiya Cyprian, Pro. Felix Musau. A Usability Evaluation Framework for Web Based Learning Management Systems Used in Kenyan Universities. IJIRST -International Journal for Innovative Research in Science & Technology| Volume 7 | Issue 3 | August 2020 ISSN (online): 23496010. http://www.ijirst.org/articles/IJIRSTV7I3018.pdf.
- 15. Gekara, M. M., Namande, B. W., & Makiya, C. R. (2021). INFORMATION LITERACY PRACTICES AS A TOOL FOR ACCESSING AND UTILIZING INFORMATION IN SECONDARY SCHOOLS IN KENYA. African Journal of Emerging Issues, 3(2), 39 61. https://ajoeijournals.org/sys/index.php/ajoei/article/view/173.
- Gekara M. M., Namande B. W & Makiya C. R (2021). Information Literacy Competencies in Secondary Schools in Kenya. Journal of Education. Volume 4||Issue 1||Page 51-75 ||May||2021|. ISSN: 26168383. https://stratfordjournals.org/journals/index.php/journal-ofeducation/article/view/743/869.
- 17. Oonge, O. Samuel, Muhambe, T. Mukisa, Cyprian Ratemo Makiya. Adoption of Bring Your Own Device: Challenges and Risks in Higher Learning Institutions in Kenya. International Journal of Computer Applications Technology and Research. Volume 9-Issue 11, 303-310, 2020, ISSN:-2319-8656. https://ijcat.com/archieve/volume9/issue11/ijcatr09111004.pdf
- Cyprian Ratemo Makiya. Integration of Mobile Intelligent Tutoring Systems in Teaching Mathematics. International Research Journal of Engineering and Technology (IRJET). Volume: 07 Issue: 07 | July 2020. e-ISSN: 2395-0056 p-ISSN: 2395-0072. https://irjet.net/archives/V7/i7/IRJET-V7I7931.pdf
- 19. Cyprian Ratemo Makiya. Technology Optimized Scavenging of Energy from Exercise Machines. International Research Journal of Engineering and Technology (IRJET). Volume: 07 Issue: 07 | July 2020 eISSN: 2395-0056 p-ISSN: 2395-0072.
- https://irjet.net/archives/V7/i7/IRJET-V7I7932.pdf

 20. Patrick Macharia Njoroge, James Ogalo, Cyprian Makiya Ratemo. A framework for Effective
 - Information Security Risk Management in Kenyan Public Universities, International Journal of Social Sciences and Information Technology, ISSN 2412-0294 Vol V Issue VI, June 2019.
 - https://www.ijssit.com/main/wpcontent/uploads/2019/10/Framework-For-EffectiveInformationSecurity-Risk-Management-In-KenyanPublic-Universities.pdf
- 21. Belator Dinah, Naomi Mwai, Jotham M. Wasike, Ratemo MC. Assessment Of The Electronic Records Management Readiness at Kenya National Archives and Documentation Service (KNADS), Nairobi, Kenya. European Journal of Research and Reflection in Management Sciences Vol. 7 No. 4, 2019 ISSN 2056-5992. http://www.idpublications.org/wp-content/uploads/2019/11/Full-Paper-ASSESSMENT-0F-THE-
 - ELECTRONIC-RECORDS-MANAGEMENT-READINESS-AT-KENYA-NATIONAL-ARCHIVESANDDOCUMENTATION.pdf
- 22. Peter Opiyo Oketch, Dr. Titus Muhambe Mukisa, Dr. Cyprian Ratemo Makiya. An Evaluation of Hybrid Machine Learning Classifier Models for Identification of Terrorist Groups in the Aftermath of an Attack.
 - International Research Journal of Engineering and Technology (IRJET). Volume: 06 Issue: 09 | Sep 2019 eISSN: 2395-0056 p-ISSN: 2395-0072. https://www.irjet.net/archives/V6/i9/IRJET-V6I9289.pdf
- 23. Kamau HK, Okoyo HO, McOyowo SO, Ratemo MC. Techniques to Control Memory Hogging by Web Browsers: An in-Depth Review. International Journal of Computer Applications Technology and Research Volume 7-Issue 04, 185-192, 2018, ISSN:-2319-8656. http://ijcat.com/archieve/volume7/issue4/ijcatr07041005.pdf
- 24. Obare EO, Okoyo HO, Oginda M, Ratemo MC. The Main Components for Evaluating The Implementation

 Of Green ICT: A Case Of Kenyan Universities. IOSR Journal of Computer Engineering (IOSR JCE) e-ISSN: 2278-0661,p-ISSN: 2278-8727, Volume 20, Issue 2, Ver. IV (Mar. Apr. 2018), PP 19-29 www.iosrjournals.org http://www.iosrjournals.org/iosr-jce/papers/Vol20issue2/Version4/D2002041929.pdf
- 25. Obare EO, Okoyo HO, Oginda M, Ratemo MC. The Common Guidelines and Procedures for Evaluating the Implementation of Greening ICT and ICT for Greening: A Case of Kenyan Universities. IOSR Journal of Computer Engineering (IOSR-JCE) e-ISSN: 2278-0661,p-ISSN: 2278-8727, Volume 20, Issue 2, Ver. III (Mar. Apr. 2018), PP 64-75 www.iosrjournals.org
 - http://www.iosrjournals.org/iosrjce/papers/Vol20issue2/Version-3/K2002036475.pdf

- 26. Obare EO, Okoyo HO, Oginda M, Ratemo MC. External Factors In Evaluating The Implementation of Green ICT In Universities In Kenya. IOSR Journal of Computer Engineering (IOSR-JCE) e-ISSN: 22780661,pISSN: 2278-8727, Volume 20, Issue 2, Ver. I (Mar. Apr. 2018), PP 54-62 www.iosrjournals.org. http://iosrjournals.org/iosr-jce/papers/Vol20-issue2/Version-1/G2002015462.pdf
- 27. Ratemo MC, Anselemo PI, Elyjoy M 2016. The Challenges in the Use of Mobile Instant Messaging Systems

in Universities and Way Forward. *IOSR Journal of Mobile Computing & Application (IOSR-JMCA) e-ISSN: 23940050, P-ISSN: 2394-0042.Volume 3, Issue 5 (Sep. - Oct. 2016), PP 38-46 www.iosrjournals.org.* http://www.iosrjournals.org/iosr-jmca/papers/Vol3-Issue5/Version-1/H03053846.pdf

- 28. Ratemo MC, Anselemo PI, Elyjoy M 2016. A Mobile Instant Messaging Update to the DeLone and McLean Model of Information Success. IOSR Journal of Mobile Computing & Application (IOSR-JMCA) e-ISSN: 23940050, P-ISSN: 2394-0042.Volume 3, Issue 5 (Sep. Oct. 2016), PP 47-54 www.iosrjournals.org. http://www.iosrjournals.org/iosr-jmca/papers/Vol3-Issue5/Version-1/I03054754.pdf
- 29. Obare, EO, Okoyo HO, Oginda M, Ratemo MC. 2015. Towards Clean Information and Communication Technology in Public Universities in Kenya. *Maseno University Journal. 1(1):262-271.* http://maseno.ac.ke/index/images/news2015/MASENO%20UNIVERSITY%20JOURNAL%20Volume%20%201 Jan-2015-Final.pdf
- 30. Ratemo MC, Obare EO 2015. Sustainable Use of Business Intelligence Tools at Kisii Bottlers (K) Limited.

Maseno University Journal. 1(1):272-281

- 31. http://maseno.ac.ke/index/images/news2015/MASEN0%20UNIVERSITY%20J0URNAL%20Volume%20%201J an-2015-Final.pdf
- 32. Ratemo MC, Obare EO, Kwama LO, Systematic Tracking of Key Performance Indicators for Enhanced Use of Enterprise Reports in the Soft Drinks Industry in Kenya, *IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 16, Issue 7. Ver. V (July. 2014), PP 93-100.*

http://www.iosrjournals.org/iosr-jbm/papers/Vol16-issue7/Version-5/K0167593100.pdf

EXAMINATION OF POSTGRADUATE THESES

A. DOCTOR OF PHILOSOPHY THESES

1. The Role of Folk Media Social Commentary in Nambale Subcounty - Kenya

Jonai Wabwire - PhD in Media and Communication

Kisii University - October 2019

2. E-Agriculture Framework for Improving Crop Productivity Among Small-holder Farms in Rural Kenya. A Case of South Eastern Kenya.

Daisy Mburu - PhD in Library and Information Science

Kisii University - October 2019

 An Implementation Framework for National Digital Research Repository System. A Study of Selected Stakeholders in Kenya.

Gichiri Peter Mwangi - PhD in Information Science

Kisii University - June 2019

B. MASTERS THESES

 Assessing the Extent of Utilization of Mobile Devices in Accessing Information from Public University Libraries in Kenya.

Burudi Peter Shibonje - Master of Science in Information Science

Karatina University - August 2023

2. An Information Security Self-assessment tool for e-governance implementation in Kenya's County Governments

Gladys Korir - Masters in Information Technology

Kabarak University - October 2019

3. Developing a Model for Security Control in Web Content Management Systems.

Alex Maraga - Master in Information Systems

Kisii University - June 2021

4. Application of GIS-Enabled Technology to Analyse Risk Factors for Malaria Prevalence.

Onoka Kelvin Onyango - Masters in Information Science

Kisii University - February 2019

5. Modifying a Security Model for Detection of Insider Security System Threats in Public Universities in Kenya

Walumbe Wapukh Denis - Master of Science in Information Systems

Kisii University - September 2019

6. An Analysis of Factors for Effective Information Security Control Systems in TIVETI in Nairobi Kenya.

Rachel Wangui Koroko - Masters of Information Science

Kisii University - October 2018

7. The User Involvement in the Implementation of Enterprise Resource Planning Systems in Public Universities. A Case of Kisii University.

Ben Mariga Bogonko - Master of Information Systems

Kisii University - February 2019

8. Records Management Practices for the Support of Governance of the County Governments of Kenya. A Case of Nyamira County.

Osebe Rodger Mokandu - Masters of Information Science

Kisii University - August 2019

Influence of Organizational Culture on the Implementation of Security Practices for Information Systems at Moi University.

Jared Ngare - Masters of Information Systems

Kisii University - June 2021

10. Block Chain-Based Smart Contracts Model for Real Estate Management.

Alex Kibet - Masters in Information Technology

Kabarak University - July 2019

SUPERVISION OF POSTGRADUATE STUDENTS |

A. Doctor of Philosophy Students Supervised to Completion

Thesis Title: Designing User Acceptance of Biometric Voter Registration Technology.

Richard Nyakundi - PhD Information Technology

School of Computing and Informatics., Kibabii University

Thesis Title: BOYD Integration framework for Institutions of Higher Learning in Kenya.

Samuel Oonge - PhD Information Technology

School of Computing and Informatics, Maseno University

3. Title: Information Literacy in Secondary Schools in Kenya.

Gekara M. M. - PhD Information and Information Scinece

School of Information Sciences and Technology, Kisii University.

B. Doctor of Philosophy Students Under Supervision

1. Title: Promoting Mobile E-Surveillance Adoption Among Kenyan Farmers: An Incentive Design Approach for Improved Crop Pest and Disease Control.

Gordon Ouma - PhD in Information Systems

School of Information Sciences and Technology, Kisii University.

Title: Enhanced Data Transmission in Mobile Banking Using LSB-AES Algorithm.

Daniel Okari - PhD in Information Systems

School of Information Sciences and Technology, Kisii University.

C. Master Degree Students Supervised to Completion

 Thesis Title: A Comparative Analysis of the Performance of Open Shortest Path First and Openflow Routing on Quality-of-Service Metrics in a Large Simulated Mobile Core Network.

Nicholas Odhiambo - Master of Science in Computer Science

School of Computing and Informatics, Maseno University.

Thesis Title: A Usability Evaluation Framework for Web Based Learning Management Systems
Used in Kenyan Universities.

Musau Victor Vincent - Master of Science in Information Systems.

School of Information Sciences and Technology, Kisii University.

Thesis Title: Information Communication Technology and Performance of Secondary Schools in Kajiado County, Kenya.

Danvas Nyarango - Master of Science in Information Science.

School of Information Sciences and Technology, Kisii University.

4. Thesis Title: Records Management Practices for Enhanced Service Delivery at the Teachers Service Commission, Nairobi, Kenya.

Salome Wandoe Mwanyungu - Master of Science in Information Science

School of Information Sciences and Technology, Kisii University.

 Thesis Title: E-readiness in the Management of the Electronic Records at the Kenya National Archives and Documentation Service, Nairobi.

Belator, Dina Jepkeu - Master of Science in Information Science

School of Information Sciences and Technology, Kisii University.

 Thesis Title: Effects of Records Management Practices on Service Delivery in Universities in Nakuru County, Kenya.

Rosemary Kanyua Miriti - Master of Science in Information Science

School of Information Sciences and Technology, Kisii University.

7. Thesis Title: A framework for Effective Information Security Risk Management in Kenyan Public Universities.

Njoroge Patrick Macharia - Master of Science in Information Systems

School of Information Sciences and Technology, Kisii University.

8. Thesis Title: An Evaluation of Hybrid Machine Learning Classifier Algorithms for Identification of Terrorist Groups in Sub-Saharan Africa.

Peter Opiyo Oketch, School of Computing and Informatics, Maseno University.

School of Computing and Informatics, Maseno University.

D. Master Degree Students Under Supervision

1. Thesis Title: A framework for Effective Information Security Risk Management in Kenyan Public Universities.

Oukoh Barrack - Master of Science in Information Systems

School of Information Sciences and Technology, Kisii University.

 Thesis Title: Record Management Practices and Service Delivery in Devolved System of Governance of Mavoko Sub-County, Machakos County Kenya.

Josiah Mbuvi - Master of Science in Information Systems

School of Information Sciences and Technology, Kisii University.

Thesis Title: Suitable Programme Selective Predictive Model for University Entrants in Kenya.

Judah Kabiru - Master of Science in Information Technology

School of Pure and Applied Sciences, Karatina University.

4. Thesis Title: Application of Radius in Authentication of Users Accessing NOSQL Database.

Julia Kimani - Master of Science in Information Technology

School of Pure and Applied Sciences, Karatina University.

SUCCESSFUL RESEARCH GRANTS |

1. Strengthening Kenya's Innovation Ecosystem (SKIES) Rapid Tech Skills Development Project

Funded by World Bank and implemented by the Ministry of Investments, Trade and Industry, State Department for Industry, with support from the World Bank between 2018-2024.

Grant amount: US\$50 Million

Role in the project: Principal Investigator

2. Integrated Digital Platform for Continuous Data Collection, Learning and Mentorship on Wearables Technology in Gatundu Sub-County

Funded by Mama Ngina University College and implemented by the School of Pure and Applied Sciences

Grant amount: KES 520,000

Role in the project: Principal Investigator

3. Skills Development on a Virtual Environment for Youth, Women and People with Disabilities in the Bodaboda Informal Sector

Funded by Skills Initiative for Africa (SIFA).

Grant amount: EUROS 436,260

Role in the project: Principal Investigator

 Excellence in Africa - Call for Proposals for the Creation of a Center of Competence in Digital Education (C-CoDE)

E-learning infrastructure expert and Participant in the call for expressions of interest in the creation of a Centre of Competence in Digital Education (C-CoDE) in the region.

Grant amount: EUROS 436,260

Role in the project: Principal Investigator

PROFESSIONAL CERTIFICATIONS/TRAINING

1. Digital Skills for Prosperity - Universities

The Open University, Government of Kenya and UKAid

2. Cisco Certified Network Associate (CCNA) Instructor

Jomo Kenyatta University of Agriculture and Technology, December 2010 Certifications

Cisco Certified Network Associate (CCNA)

Maseno University, Cisco Academy, December 2006 Certifications

4. Enterprise Reporting and Databases

G7 Systems Kenya Limited, October 2006 - December 2006 Certifications

CONFERENCES, WORKSHOPS AND EXHIBITIONS

1. East African Employability Summit Stakeholders Engagement Workshop

Venue: Daystar University

Theme of the conference: Exchange of ideas and insights among key Stakeholders ahead of the East African Employability Summit 2024 (EAES24).

Organizers: Corporate Career Academy

Date: Monday, 24 June 2024 Role in the conference: Panelist

Bridging the Gap: Strategies for Commercializing Academic Research: Panel Discussion

Venue: Riara University

Theme of the conference: Strategies for Commercializing Academic Research

Organizers: iHub

Date: Wednesday, 29th May 2024 Role in the conference: Panelist

3. Enabling Industrialization through Open Innovation

Venue: Radisson Blu Hotel

Theme of the conference: Strengthening Industry-Academia partnerships

Organizers: Ministry of Trade, Investment and Industry (MITI) in collaboration with World Bank

Date: 6th June 2024

Role in the conference: Panelist

4. The HiETeC-2024 Conference

Venue: Daystar University

Theme of the conference: Adoption of Disruptive Education Technologies and Pedagogical Skills in a Transformative Higher Education Ecosystem

Organizers: Daystar University and AMREF University

Date: February 21 2024 - February 23 2024

Role in the conference: Panelist - Application of online pedagogy to impact on the learner's behaviour in Distance Education.

5. International Conference on Climate Change and Sustainable Development

Venue: Karatina University

Theme of the conference: Mitigating the impact of climate change and biodiversity loss on sustainable development. A call for Action.

Organizers: Karatina University

Date: May 24 2024 - May 26 2024

Role in the conference: Organizing team

6. Consultative Workshop on the Strengthening Agribusiness Incubation Ecosystems in Africa

Venue: Dublin, Ireland

Theme of the workshop: Implementation of capacity building, applied research and development in agribusiness incubation policy and benchmarking frameworks in Africa.

Organizers: Food and Agriculture Organization (FAO) and Sustainable Food Systems Ireland (SFSI), a Division in the Department of Food, Agriculture and Marine (DFAM).

Date: November 21, 2022, November 25, 2022
Role in the workshop: Innovation Consultant

Consultative Workshop on for Strengthening Agribusiness Incubation Ecosystems in Africa

Venue: Speke Hotel, Kampala, Uganda

Theme of the conference: for Strengthening Agribusiness Incubation Ecosystems in Africa

Organizers: African Union, FAO, African Agribusiness Incubators Network (AAIN), the Region Universities Forum for Capacity Building in Agriculture (RUFORUM), Agripreneurship Alliance and Sustainable Food Systems Ireland (SFSI)

Date: June 13, 2022, June 17, 2022

Role in the workshop: Innovation Consultant

8. Consultative Workshop on Enhancing Innovation Through Research Amongst Academia

Venue: Mama Ngina University College

Theme of the conference: Enhancing Innovation through Research amongst Academia

Organizers: Mama Ngina University College STI Committee

Date: Friday 16th February, 2024 Role in the workshop: Presenter

9. Consultative Workshop on Development of Draft Strategic Plan and Policy for ODECE

Venue: Malindi General Hospital

Theme of the conference: Development of Strategic Plan and Policy for Open, Distance, E-Learning and Continuing

Education

Organizers: Garissa University

Date: May 24, 2024 - May 2 15th - 18th February 2024

Role in the workshop: Facilitator

10. Online Consultative Workshop on Refinement of Draft Strategic Plan and Policy for ODECE

Venue: online

Theme of the conference: Development of Strategic Plan and Policy for Open, Distance, E-Learning and Continuing

Education

Organizers: Garissa University

Date: January 15, 2024 - January 17th 2024

Role in the workshop: Facilitator

11. Consultative Workshop on Finalization of Development of Strategic Plan and Policy for ODECE

Venue: Garissa University

Theme of the conference: Development of Strategic Plan and Policy for Open, Distance, E-Learning and Continuing

Education

Organizers: Garissa University

Date: December 12, 2023 - December 15 2023

Role in the workshop: Facilitator

12. Consultative Workshop on Enhancement of Governance Capacity to Advance Collaboration in the Innovation Ecosystem

Venue: Sawela Lodge, Naivasha

Organizers: GIZ Digital Transformation Centre Kenya

Date: October 30, 2023 - November 2 2023

Role in the workshop: Participant

13. Consultative Workshop on Enhancement of Governance Capacity to Advance Collaboration in the Innovation Ecosystem

Venue: Serena Maiyan, Nanyuki

Organizers: GIZ Digital Transformation Centre Kenya

Date: March 25, 2024 - March 28 2023 Role in the workshop: Participant

14. Exhibition – ESO Digitization Strengthening Workshop

Venue: Emory Hotel, Nairobi

Theme of the conference: Enhancing the Capacity of Enterprise Support Organizations for Enhance Service Delivery

Organizers: Kenya Innovation Agency

Date: February 15, 2023 - February 17, 2023

Role in the workshop: Participant

15. Exhibition - Kenya Innovation Week 2023 - Commonwealth Edition

Venue: Edge Convention Centre, Nairobi

Theme of the conference: Innovating to Unlock Our Common Wealth

Organizers: Kenya Innovation Agency

Date: 27th November to 1st December 2023

Role in the conference: Delegate

Exhibition - The Regional Agricultural Society of Kenya Show

Venue: Kisumu

Organizer: Agricultural Society of Kenya

Item: Integrated Smart Kuku Farm

Date: 27th July 2016 - 31st July 2016

Role in the Exhibition: Exhibitor

17. National Council for Science, Innovation and Technology

Venue: Kenya International Conference Center

Organizer: National Council for Science, Innovation and Technology

Item: Integrated Smart Kuku Brooder

Date: 16th May 2016 – 20th May 2016

Role in the Exhibition: Exhibitor

18. The Commission for Higher Education Exhibitions, CUEA

Venue: Catholic University of East Africa

Organizer: Commission for Higher Education

Item: Integrated Smart Kuku Incubator Date: 22nd, March 2010 - 27th March 2010

Role in the Exhibition: Exhibitor

19. The Regional Agricultural Society of Kenya Show, Kisumu

Exhibition - The Regional Agricultural Society of Kenya Show

Venue: Kisumu

Organizer: Agricultural Society of Kenya Item: Smart Kuku Security System

Date: 2nd August 2006 - 5th, August 2006

Role in the Exhibition: Exhibitor

20. The Commission for Higher Education Exhibitions

Venue: Green Hill Hotel - Nyeri

Organizer: Commission for Higher Education

Item: Electronic Voting System

Date: 22nd, March 2010 - 27th March 2010

Role in the Exhibition: Exhibitor

CONSULTANCIES

Lead Consultant - Upgrading Library System and Digitization of Student Data

Kenya Power and Lightening Company - Institute of Energy Studies

April 2024 - To Date

Lead Consultant - Establishment of the Center for Open, Distance, Electronic learning and Continuing Education

Garissa University

December 2023 to Date

3. ICT Expert - Recruitment of ICT Director for Garissa University.

Garissa University

December 2023

COMMUNITY OUTREACH AND RELATED ENGAGEMENTS!

1. Board Member, Association of Startups and SME Enablers of Kenya

1st July 2023 - To Date

2. Founder and President, Hub Icons Network

27th July 2019 - To Date

3. Board of Management, Gekomu Primary School

22nd, March 2010 - To Date

4. Board of Management Genga Secondary School

16th May 2016 - 20th May 2016

Patron, Africa Association of Student Innovators and Technoprenuers

Jan 2023 - To Date

6. Patron, Presidential Awards Club

Jan 2023 - To Date

7. Patron, Catholic Students Association

Jan 2023 – To Date

8. Students Governing Council - Maseno University Student Organization

June 2004 - April 2005 - Academic Affairs Director and Member

AWARDSI

1. I Choose Nations Award

July 2023

2. 5 Years Instructor Award

December 2014

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