# Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT



Name: Dr. Ratemo Makiya Cyprian					
Α.	Personal Mobile:	+254-722-741-666	Alternative Mobile:	+254-726-446-540	
В.	Official Address:	P. O. Box 408-040200, Kisii	Personal Address:	P. O. Box 1991-040200, Kisii	
C.	Personal e-mail:	mcratemo@gmail.com	Official E-Mail:	ratemo.cyprian@mnu.ac.ke	
D.	Nationality:	Kenyan	Date of Birth:	February 10, 1983	
<u>E.</u>	Gender:	Male	Marital Status:	Married with four children	
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Α.	Education		PhD IT, MSc QRM, MPhil IT, BSc CS&E, KCSE (B+), KCPE (488/700)		
B.	Teaching experience		Over fifteen (15) years teaching experience as a Senior Lecturer, Lecturer, Tutorial Fellow and Lab Demonstrator		
C.	Administrative Responsibilities		Over (fifteen) 15 years as Ag. Dean, Chair of Department, CISCO Center Academy Manager, Director ICT, Director ODeL (Acting), Director E- Learning, Campus Coordinator and Coordinator of Industrial Attachment among others		
D.	Publications		Over thirty (30) publications in peer-reviewed refereed journals		
E.	Research Funding		Over Seven Million Kenya Shillings (Kes 7,000,000) in grants		
F.	Students Supervision		Over fifteen (15) postgraduate students supervised to completion (PhD and Masters)		
G.	PhD & Masters Theses Examined		Over fifteen (15) postgraduate students' theses examined (PhD and Masters)		
Н.	International Conferences		Over five (5) conferences attended as an organizer, panelist or presenter		
I.	Workshops/Seminars		Over five (5) workshops/seminars as an organizer, panelist or presenter		
J.	Exhibitions		Over five (5) exhibition panelist or presenter	Over five (5) exhibitions attended as an organizer, panelist or presenter	
K.			ICT infrastructure	Over five (5) consultancies in the deployment of ICT infrastructure	
L.	Membership with Professional Communities		Two (2) memberships (communities of practice)		
Μ.			Over ten (10) profess	Over ten (10) professional certifications	
N.	Recognition		2 Awards		

# Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

## University-Level Education |

## PhD IT Doctor of Philosophy in Information Technology

Kibabii University, December 2017

Thesis: Improvement of the DeLone and McLean's Information System Success Models to Focus on Mobile Instant Messaging in Public Universities in Kenya

### MSc QRM Master of Science in Quantitative Research Methods

Maseno University, December 2014

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

### MPhil IT Master of Philosophy in Information Sciences (Information Technology)

Moi University, December 2011

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

# BSc CS&E Bachelor of Science in Computer Science and Engineering

Maseno University, December 2006

Classification: Second Class Honors Upper Division

## Current Employment |

### A. MAMA NGINA UNIVERSITY COLLEGE - A CONSTITUENT OF KENYATTA UNIVERSITY

# Senior Lecturer - Department of Computing & Information Technology, School of Pure and Applied Sciences

August 2023 -To Date

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

# Ag. Dean, School of Pure and Applied Sciences and Substantive Chair, Department of Computer Science and Information Technology

August 2023 - To Date

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

### **CISCO Networking Academy Manager and 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.

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

### Standing Committees and Ad Hoc Committees

September 2023 -To Date

- i. KIEP-SKIES Grant Implementation Committee Focal Person/Principal Investigator
- ii. ICT Committee (Chairperson)
- iii. ERP Contract Implementation Committee (Chairperson)
- iv. Open, Distance and E-Learning Committee (Chairperson)
- v. Enhancing MNUC Niche on Digital Technology and Primary Healthcare (Chairperson)
- vi. Cultural Week Committee (Chairperson)
- vii. Deans Committee (Member)
- viii. Science Technology and Innovation Committee (Member)
- ix. MNUC Productivity Mainstreaming Committee (Member)
- x. MNUC Grant Writing Championship Committee (Member)
- xi. Training Committee (Member)
- xii. Mentorship Committee (Member)
- xiii. Evaluation Committee ERP Hosting Infrastructure Hardware and Software (Member)
- xiv. Library Management and ICT Committee (Member)

## Past Work Experience

### **B. KARATINA UNIVERSITY**

# Senior Lecturer - Computer Science & Information Technology, School of Pure and Applied Sciences

November 2022 - August 2023

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

### Director, ICT - Directorate of ICT

December 2022 - August 2023

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

### 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.

### **Standing Committees and Ad Hoc Committees**

September 2023 -To August 2023

- i. International Conference on Climate Changes
- ii. Senate ODeL Standing Committee
- iii. Network Expansion Inspection and Acceptance Committee
- iv. Network Expansion Contract Evaluation Committee

# Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV. CCNA I-IV Instructor. BSc CS&T. MSc ORM. MPhil IS-IT. PhD IT

### C. KISII UNIVERSITY

# Lecturer - Department of Computing Sciences, School of Information Science and 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.

### 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

### **Standing Committees and Ad Hoc Committees**

September 2023 -To August 2023

- i. ERP Inspection and Acceptance Committee (Chairperson)
- ii. University yNetwork Working Group (Chairperson)
- iii. E-Learning Committee (Secretary)
- iv. Website and Digital Engagement Committee (Member)
- v. Job Description Committee (Member)

#### D. MASENO UNIVERSITY

### **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.

### 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.

### **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

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

### 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

### School Coordinator - Industrial Attachment and Field Trips

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

### **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.

### **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

### E. G7 SYSTEMS LIMITED

### **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)

### **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

### F. ST. PATRICK'S SECONDARY SCHOOL, MOSOCHO

### Computer Technician and Graphics Designer

January 2000 - December 2002

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

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

### Computer Technician and Instructor

January 2000 - December 2002

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

### 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.

### **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 |

- 1. 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
- 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 Anticounterfeiting. 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
- 5. 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

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

- 6. 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
- 7. 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)
- 8. 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-acceptableof-biometric-voter-registration-technology-4NnE.pdf
- 10. 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
- 11. 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
- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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.

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

- 16. 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
- 17. 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
- 18. 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
- 19. 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
- 20. 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-OF-THE-ELECTRONIC-RECORDS-MANAGEMENT-READINESS-AT-KENYA-NATIONAL-ARCHIVESANDDOCUMENTATION.pdf
- 21. 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
- 22. 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
- 23. 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: 22780661,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
- 24. 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

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- 25. 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
- 26. 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
- 27. 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
- 28. 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
- 29. Ratemo MC, Obare EO 2015. Sustainable Use of Business Intelligence Tools at Kisii Bottlers (K) Limited.

  \*\*Maseno\*\* University\* Journal.\*\* 1(1):272-281
- 30. http://maseno.ac.ke/index/images/news2015/MASENO%20UNIVERSITY%20JOURNAL%20Volume%20%201 J an-2015-Final.pdf
- 31. 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. Jonai Wabwire (PhD in Media and Communication: The role of folk media social commentary in Nambale subcounty Kenya
  - Kisii University October 2019
- Daisy Mburu (PhD in Library and Information Science): E-Agriculture Framework for Improving Crop Productivity Among Small-holder Farms in Rural Kenya. A Case of South Eastern Kenya.
   Kisii University - October 2019
- Gichiri Peter Mwangi (PhD in Information Science): An Implementation Framework for National Digital Research Repository System. A Study of Selected Stakeholders in Kenya.
   Kisii University - June 2019

### **B.** Masters Theses

1. Burudi Peter Shibonje (Assessing the Extent of Utilization of Mobile Devices in Accessing Information from Public University Libraries in Kenya.

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Karatina University - August 2023

2. Gladys Korir (Masters in Information Technology): An Information Security Self-assessment tool for e-governance implementation in Kenya's County Governments

Kabarak University - October 2019

3. Alex Maraga (Master in Information Systems): Developing a Model for Security Control in Web Content Management Systems.

Kisii University - June 2021

4. Onoka Kelvin Onyango (Masters in Information Science): Application of GIS-Enabled Technology to Analyse Risk Factors for Malaria Prevalence.

Kisii University - February 2019

5. Walumbe Wapukh Denis (Modifying a Security Model for Detection of Insider Security System Threats in Public Universities in Kenya)

Kisii University - September 2019

6. Rachel Wangui Koroko (Masters of Information Science): An Analysis of Factors for Effective Information Security Control Systems in TIVETI in Nairobi Kenya.

Kisii University - October 2018

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

Kisii University - February 2019

8. Osebe Rodger Mokandu (Masters of Information Science): Records Management Practices for the Support of Governance of the County Governments of Kenya. A Case of Nyamira County.

Kisii University - August 2019

9. Jared Ngare (Masters of Information Systems): Influence of Organizational Culture on the Implementation of Security Practices for Information Systems at Moi University.

Kisii University - June 2021

10. Alex Kibet (Masters in Information Technology): Block chain based smart contracts model for real estate management.

Kabarak University - July 2019

# Supervision of Postgraduate Students |

#### A. Doctor of Philosophy Students Supervised to Completion

 Richard Nyakundi. School of Computing and Informatics. A Model for Analyzing Usage Factors in Thesis Title: Designing User Acceptance of Biometric Voter Registration Technology.

2. Samuel Oonge. School of Computing and Informatics, Maseno University

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

3. Gekara M. M. School of Information Sciences and Technology, Kisii University.

Title: Information Literacy in Secondary Schools in Kenya.

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

### B. Doctor of Philosophy Students Under Supervision

1. Gordon Ouma. School of Information Sciences and Technology, Kisii University.

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

Daniel Okari. School of Information Sciences and Technology, Kisii University.

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

#### C. Masters Degree Students Supervised to Completion

1. Nicholas Odhiambo. School of Computing and Informatics, Maseno University.

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.

2. Musau Victor Vincent. School of Information Sciences and Technology, Kisii University.

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

3. Danvas Nyarango. School of Information Sciences and Technology, Kisii University.

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

4. Salome Wandoe Mwanyungu, School of Information Sciences and Technology, Kisii University.

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

5. Belator, Dina Jepkeu, 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.

6. Rosemary Kanyua Miriti, School of Information Sciences and Technology, Kisii University.

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

7. Njoroge Patrick Macharia, School of Information Sciences and Technology, Kisii University.

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

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

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

#### D. Masters Degree Students Under Supervision

Oukoh Barrack, School of Information Sciences and Technology, Kisii University.

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

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

2. Josiah Mbuvi, 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.

3. Judah Kabiru, School of Pure and Applied Sciences, Karatina University.

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

4. Julia Kimani, School of Pure and Applied Sciences, Karatina University.

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

## Successful Research Grants |

### A. Strengthening Kenya's Innovation Ecosystem (SKIES) Rapid 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

# B. 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

# C. 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

# D. 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

### A. Digital Skills for Prosperity - Universities

The Open University, Government of Kenya and UKaid

#### B. Cisco Certified Network Associate (CCNA) Instructor

Jomo Kenyatta University of Agriculture and Technology, December 2010 Certifications

C. Cisco Certified Network Associate (CCNA)

# Curriculum Vitae |---

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

Maseno University, Cisco Academy, December 2006 Certifications

#### D. Enterprise Reporting and Databases

G7 Systems Kenya Limited, October 2006 - December 2006 Certifications

## Conferences, Workshops and Exhibitions |

#### A. 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.

### B. 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

### C. 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

#### D. 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

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

E. 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

F. 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

G. 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

H. 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

I. 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

J. 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

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

### K. 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

### L. 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

#### M. 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

### N. 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

#### O. 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

### P. 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

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

Q. 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

# Consultancy |

A. Lead Consultant - Upgrading KOHA Library System and Digitization of Student Data

Institute of Energy Studies

April 2024 - To Date

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

**Garissa University** 

December 2023 to Date

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

**Garissa University** 

December 2023

## Community Outreach and Related Engagements |

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

1st July 2023 - To Date

B. Founder and President, Hub Icons Network

27th July 2019 - To Date

C. Board of Management, Gekomu Primary School

22nd, March 2010 - To Date

D. Board of Management Genga Secondary School

16th May 2016 - 20th May 2016

E. Patron, Africa Association of Student Innovators and Technoprenuers

Jan 2023 - To Date

F. Patron, Presidential Awards Club

Jan 2023 - To Date

### Dr. Ratemo Makiya Cyprian, PhD CCNA I-IV, CCNA I-IV Instructor, BSc CS&T, MSc QRM, MPhil IS-IT, PhD IT

### G. Patron, Catholic Students Association

Jan 2023 - To Date

### H. Students Governing Council - Maseno University Student Organization

June 2004 - April 2005 - Academic Affairs Director and Member

### **Awards**

#### A. I Choose Nations Award

July 2023

#### B. 5 Years Instructor

December 2014

## **Referees**

### A. Prof. Francklin Wabwoba, PhD

Acting Deputy Vice Chancellor (Academic and Student Affairs) and Founding Dean of the School of Computing and Informatics, Kibabii University

Mobile: 0723844904

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### B. Prof. Fred Mzee Awuor, PhD, PhD

Ag. Deputy Vice Chancellor, Planning Finance and Administration, Kisii University

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Email: fawuor@kisiiuniversity.ac.ke

### C. Prof. CPA Richard Kiai, PhD

Deputy Vice Chancellor, Planning, Finance and Administration, Karatina University

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### D. Prof. Maurice Owino Oduor, PhD

Deputy Vice Chancellor (Planning, Research and Development, Kabianga University

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