## CURRICULUM VITAE

DR. KELVIN KABETI OMIENO, Ph. D

BSc. (Computer Science-First Class Honors)

MSc (IT), MBA in Corp Mgt.(c), Ph.D. (BIS)



SENIOR LECTURER, INFORMATION SYSTEMS

AND

DEAN, SCHOOL OF COMPUTING

AND INFORMATION TECHNOLOGY

KAIMOSI FRIENDS UNIVERSITY COLLEGE(KAFUCO)

KAIMOSI, KENYA

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#### 1. PERSONAL DATA

Name : Kelvin Kabeti Omieno

Date of Birth : 12th March, 1984

Place of Birth : Busia County

Citizenship : Kenyan
Marital Status : Married

Residence : Kakamega, Kakamega County

Language : English, Luhya (Very Good), Kiswahili (Good), French (Basic)

Religion : Christian

#### **CURRENT ADMINISTRATIVE POSITON:**

Dean, School of Computing and Information Technology

Kaimosi Friends University College (KAFUCO)

Address : Box 385-50309 Kaimosi, Vihiga County Kenya

**Telephone** : +254-726-849197/ +254-734-849197/ +254-728-703999

Website :www.kafuco.ac.ke OR http://www.kelvinomieno.net
Email (s) :komieno@kafuco.ac.ke OR kelvinkabeti@yahoo.com

#### 2. SUMMARY OF BIO DATA

Dr. Kelvin Kabeti Omieno is Founding and Current Dean, School of Computing and Information Technology (SCIT), Kaimosi Friends University College (KAFUCO) which is a Constituent College of Masinde Muliro University of Science and Technology (MMUST) since February 2019. Dr. Omieno has acquired over six (6) years of hands-on administrative experience in higher management in Kenya. He has been a member of the University College Academic Board (UCAB) and MMUST Senate since Feb 2019 and August 2014 respectively. In 2014 he was appointed Chairman of Department of Computer Science, MMUST. In December 2016, Dr. Omieno was appointed Founding Dean, School of Computing and Informatics (in Acting Capacity), MMUST a position he held till January 2019. Dr. Omieno has served as a chairman and member in several other academic and non-academic appointments.

Besides offering leadership at University Dr. Omieno has good experience in governance of Basic Education in the country. He is currently serving as Board member of Makunda Mixed Secondary School in Busia County (2019 to date) and Co-opted member of Board of management of St. Anne Bunyala Girls Secondary School (2019 to date) Busia County. He is currently a member of Board of Governors of Wanga Technical and Vocational College in Kakamega County (2019 to Date) and Chairperson Finance and Human Resource Sub Committee. Moreover, Dr Omieno is pre-qualified Resource Person with Kenya National Qualification Authority (KNQA) for 2019/20-2020/21 period and a Subject Matter Expert with KASNEB in the field of ICT and relates areas.

Dr. Omieno served as the representative of Academic Deans of KAFUCO in the University College Management Board (UCMB), and currently represents Deans and Directors of KAFUCO in Senate of Masinde Muliro University of Science and Technology.

Dr. Omieno is an accomplished scholar with proven track record in formulating and managing academic programs as demonstrated by the new programmes developed; over 30 publications in peer reviewed journals; supervising and mentoring masters and PhD students and serving as

academic head in the School. Dr. Omieno has also been involved in several Research grants both as Team Leader and as co-researcher.

Dr. Kelvin K. Omieno is a holder of Bachelor of Science in Computer Science (First Class Honors) (2008) and Master of Science in Information Technology (2012) degrees from Masinde Muliro University of Science and Technology and Doctor of Philosophy in Business Information Systems (2017) from Jaramogi Oginga Odinga University of Science & Technology, Kenya. Currently Dr. Omieno is pursuing Master of Business Administration (Corporate Management) at KCA University.

Dr. Omieno was employed by Masinde Muliro University of Science and Technology upon graduation in 2009 as a Graduate Assistant and later promoted to Assistant Lecturer (2012), and Lecturer (2013). He later joined Kaimosi Friends University College as Senior Lecturer (2019). He has a cumulative 12 years of teaching and research experience at various institutions of higher learning including Masinde Muliro University of Science and Technology, Kaimosi Friends University College, Jaramogi Oginga Odinga University of Science and Technology, Jomo Kenyatta University of Agriculture and Technology, Kibabii University amongst others. He is a professional member of the Association for Computing Machinery (ACM), the largest association of computing professionals globally and also a member of Internet Society

#### 3. LEADERSHIP AND MANAGEMENT POSITIONS HELD

#### 3.1. MANAGEMENT POSITIONS HELD

- 1. **Feb 2019- to Date: Dean,** School of Computing and Information Technology, Kaimosi Friends University College-**Appointed by Principal**
- 2. 1<sup>st</sup> July 2019-19<sup>th</sup> July 2019: Acting Deputy Principal (Academic and Student Affairs), Kaimosi Friends University College (KAFUCO)- Appointed by Principal
- Dec 2016- Jan 2019: Founding Dean, School of Computing and Informatics, Masinde Muliro University of Science and Technology-Appointed by Vice-Chancellor
- Aug 2014-Dec 2016: Chairman, Department of Computer Science, Masinde Muliro University of Science and Technology-Appointed by Vice-Chancellor.

#### 3.2. LEARSHIP AND COMMITTEES SERVED

- October 2020-To Date: Appointed Subject Matter Expert, Kenya Accountants and Secretaries National Examination Board (KASNEB) by CEO, Kenya
- 2019/20-2020/21 FYs: Appointed Pre-Qualified Resource Person, Kenya National Qualification Authority by Director General/CEO, Kenya
- 3. October 2019 To Date: Board Member, Wanga Technical and Vocational College (Wanga TVC), Kakamega County Appointed by Cabinet Secretary Ministry of Education
- **4. April 2021-To Date: Chairman**, Open Distance and e-Learning (ODeL) Board of KAFUCO. **Appointed by Principal**
- **5. January 2021-To Date: Member**, Internal Collective Bargaining Agreement (CBA) Negotiation Committee of KAFUCO. **Appointed by Principal**

- 6. November 2020-To Date: Member, Corporate Communications Committee of KAFUCO.

  Appointed by Principal
- 7. August 2020-To Date: Member, Library Advisory Committee of KAFUCO. Appointed by Principal
- **8. August 2020-To Date: Member**, Ad-Hoc committee for Anti-Plagiarism of KAFUCO. **Appointed by Principal**.
- August 2020-To Date: Member, Ad-Hoc committee for Online Examinations of KAFUCO. Appointed by Principal.
- **10. July 2020-To Date: Chairman**, UCAB Development and Review of Policies Committee of KAFUCO. **Appointed by Principal**.
- 11. July 2020-To Date: Member, Finance Committee of KAFUCO. Appointed by Principal.
- 12. June 2020-To Date: Member, Ad-Hoc Committee- University College Website. Appointed by Principal.
- **13. April 2020-To Date: Member**, Project Implementation Committee of KAFUCO. **Appointed by Principal.**
- 14. April 2020- to Date: Chairman, eLearning Committee of KAFUCO. Appointed by Deputy Principal (Academic and Student Affairs)
- **15. Nov 2019-To Feb 2020: Chaired**, UCMB Policies Review Committee-Kaimosi Friends University College: To review University College Statutes 2020, Schemes of Service, Staff Establishment and HR Policy and Manual
- **16. Feb 2019-ToDate: Chairman**, KAFUCO 2018/19-2022/23 Strategic Plan Review Committee. **Appointed by Principal**
- **17.** October 2019-To Date: Programme Leader, Undergraduate and Postgraduate Programmes. **Appointed by Principal**.
- **18. February 2019-ToDate: Member**, Project Management Team- Proposed Development of Land Use Master Plan-Appointed by Principal
- 19. February 2019-ToDate: Website Manager, Kaimosi Friends University College Website.

  Appointed by Principal
- 20. February 2019-ToDate: Patron, ERP Implementation Committee-Appointed by Principal
- **21. February 2019-To February 2020: Member**, University College Management Board (UCMB)- Kaimosi Friends University College and Representative of Deans
- **22. Feb 2019-ToDate: Member**, University College Academic Board (UCAB), Kaimosi Friends University College
- **23. Feb 2019-ToDate: Member**, University College Research and Graduate Studies Committee, Kaimosi Friends University College

- **24.** March 2018- Jan 2019: Member, ISMS Management Committee to oversee Implementation of ISMS ISO 27001:2015 Standard, Appointed by Vice Chancellor
- **25.** Established a Collaboration between UoN School of Computing and Informatics and MMUST School of Computing and Informatics on HealthIT Project, December 2016
- **26. Member** of Scientific Committee Organizing for World Conference on Transformative Education, to be held on 26th- 2018th July 2018, MMUST
- **27. Member** of the Scientific and ICT and Publicity Sub-Committees organizing for The First Pan African Research Congress on Knowledge Generation and Dissemination, to be held on 17th– 22nd June 2018, MMUST
- 28. Feb 2017-Member, Steering Committee for MMUST Professional Centre, Appointed by Deputy Vice Chancellor (Planning, Research and Innovation)
- 29. Internal Quality Auditor on ISO 9001:2008 Standard and QMS Documentation
- **30. Member of Senate**, Deans Committee and various other University Senate Committees, and short-listing committees for Teaching and Non-Teaching staff.

#### 4. ACADEMIC APPOINTMENTS

- January 2019- Present: Senior Lecturer, Department of Information Technology and Informatics, School of Computing and Information Technology, Kaimosi Friends University College, Vihiga-Kenya.
- October 2013- January 2019: Lecturer, Department of Computer Science, School of Computing and Informatics, MMUST, Kakamega-Kenya
- November 2012-October 2013, Assistant Lecturer, Department of Computer Science, MMUST, Kakamega-Kenya
- January 2009-October 2012, Graduate Teaching Assistant, Department of Computer Science Masinde Muliro University of Science & Technology, Kakamega-Kenya
- ❖ February 2020-todate: -Member, Member, Board of Graduate Studies, Kaimosi Friends University College- Appointed by Principal
- February 2020-todate: -Coordinator, School Graduate Studies Committee, School of Computing and Information Technology, Kaimosi Friends University College- Appointed by Principal.
- February 2020-todate: -Member, Chairman, Departmental Graduate Studies Committee, Department of Information Technology and Informatics, Kaimosi Friends University College -Appointed by Principal
- ❖ Sept 2018-Sep 2021: -Member, Technical Vocational Education and Training (TVET) Curriculum Review Committee- Appointed by Vice Chancellor
- ❖ Jan 2018- Jan 2019: Member, School of Open Learning and Continuing Education (SOLACE) Board Member for Short Courses, Appointed by Deputy Vice Chancellor (Planning, Research and Innovation)

- ❖ Feb 2017- Jan 2019: Member, Library/ICT Committee of Senate, Appointed by Vice-Chancellor, MMUST
- March 2018- Jan 2019: Chairperson, MMUST Webometrics Advisory Committee, appointed by Vice Chancellor which saw ranking of MMUST grow from pos 13 -7/8 Nationally
- ❖ Jan 2017-Member, Task force on Transforming MMUST into Paperless University by 2017, Appointed by Deputy Vice Chancellor (Planning, Research and Innovation)
- Chaired Senate and Deans Committees (Appointed in January 2017) that led to Restructuring of Directorate of Postgraduate Studies, Directorate of Open Distance and E-Learning and SOLACE.

#### 5. EDUCATION QUALIFICATIONS AND COMPTENCY DEVELOPMENT

### **5.1. ACADEMIC QUALIFICATIONS**

### [1] Postgraduate Education

 {2013/14-2016/17}: PhD in Business Information Systems, Jaramogi Oginga Odinga University of Science and Technology, Kenya

Thesis Title: "Usability Maturity Assessment for Virtual Learning Systems in Kenya" Supervisors: Dr. George Raburu, Dr. Pamela Raburu & Prof. Omollo Ongati

 {2009/10-2011/12}: MSc. in Information Technology, Masinde Muliro University of Science and Technology, Kenya

Thesis Title: "A Framework to Measure Intranet Usage in Kenyan Public Universities" Supervisors: Prof. Patrick J. Ogao & Mr. Simon M. Karume

 {2019/20-To Date}: Master of Business Administration (MBA) in Corporate Management (Candidate), Kenya College of Accountancy University, Kenya Proposal Title: "Evaluating the impact of innovation and technology on employee performance: A case of Kenyan University"

#### [2] Undergraduate Education

 {2004-2008}: Masinde Muliro University of Science & Technology, Kenya Undergraduate -Bachelor of Science (Computer Science), Bachelor of Science (Computer Science), First Class Honors Specialization: "Software Engineering"

#### [3] Secondary Education

{2002}: Teremi High School, High School {Kenya Certificate of Secondary Education}

6/8 Plain A's and A- Aggregate Score

#### **5.2. COMPETENCY DEVELOPMENT**

- 2020: Training on Occupational Safety and Health Awareness, 17th April, 2020, KAFUCO
- ❖ 2018: Workshop Training on Building a Culture of Peace and Non-Violence organized by MMUST and Victims of Terrorism Organization Kenya, 5th-8th June 2018, Bishop Stam-Kenya

- ❖ 2018: Workshop on 3rd Annual mUzima Hackathon organized by Institute of Biomedical Informatics (IBMI), Moi University 6th-8th June 2018
- ❖ 2018: MoH and Universities Health Information Research Consultative Workshop Organized by HealthIT Project 12th − 13th March 2018 in Homa Bay County
- ❖ 2016: ISO 9001:2008 Standard and QMS Continual Improvement Training, Bishop Stam, Aug 29-30, 2016.
- ❖ 2015: Attended workshop on Deans, Directors, Coordinators and HODs Induction organized by MMUST University Management, Bishop Stam- 28th April-29th April 2015.

#### **5.3. ADDITIONAL SKILLS**

- Microsoft Office package: Microsoft Word, Excel, Access
- ❖ Database operation: Microsoft Office Access, Oracle 8i
- Statistical operation: SPSS, STATA
- Programming: C++, SQL, HTML, C, PHP, Java, VB.NET, Prolog, C#, J2ME, JavaScript, XDK. Python

#### 6. RELEVANT ACADEMIC EXPERIENCE

### 6.1. TEACHING, APPRAISAL, SUPERVISION & SCHOLARSHIPS

#### **6.1.1 Taught Courses**

Over Eleven (11) years of teaching experience at PhD, Masters, Undergraduate and Diploma levels **Postgraduate {PhD and Masters} Courses Taught:** 

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Trends in Information Systems Research Methodology

Enterprise Application Development and Advanced Object-Oriented Programming

**Architectures** 

Object Oriented Analysis and Design Advanced Cryptography and Security Analysis

Software Architectures and Emerging Issues Machine Learning

Advanced Database Systems

#### **Undergraduate Courses Taught**

**Object Oriented Programming** 

Procedural programming Programming with C#
Data Structures and Algorithms Computer networks
Fundamentals of computing Software Engineering
Systems Analysis and Design Operating Systems

Logic Programming Database systems

Mobile Application Programming Computer Architecture

Programming languages: C, C++, PHP, Java, VB.NET, Prolog, C#, J2ME, JavaScript, XDK. Python

**Environments:** Custom Software Development, Mobile App Development, Web App Development

#### 6.1.2. Appraisal performance and Commendations

- ❖ Vice Chancellor's Commendation during the 1st MMUST Gala Dinner and 2015 Awards Ceremony-1st December 2015, MPH, MMUST
- Typically, 70% 90% performance as evaluated by students, MMUST
- Staff performance appraisal has been Exceeds Expectations year-by-year, MMUST

#### 6.1.3. Scholarships

- 2009-2011: MMUST Partial University Scholarship for MSc in IT, MMUST
- 2004-2008: Joint Admissions Board (JAB) and Higher Education Loans Board, Kenya for Undergraduate programme, MMUST

## 6.1.4. Thesis Supervision

I am currently co-supervising PhD and MSc students: TEN (10) completed and several others at advanced stages of their research work. NB: Data Collection-means Proposal was approved by Board, Directorate of Postgraduate Studies. They include the following:

S/no Name & Supervisors		Level & Thesis Title University		Completion Status		
Α	Completed Postgraduate Students					
1.	Dr. Kennedy Ondimu Supervisors:Prof. Muchiri G, Prof Ateya I, & Dr. Omieno K	PhD, MMUST	Resource Perspective-Based Situational Method for Improving Healthcare Business Processes	Graduated Dec'18 Graduated Dec'20		
2.	Dr. John Ndia Supervisors: Prof Muchiri &, Dr. Omieno	PhD, MMUST	Structural Complexity Framework and Metrics for Analyzing the Maintainability of Sassy Cascading Style Sheets			
3.	Dr. Amos Chege Kirogo Supervisors: Dr. Omieno, Dr. Mutua & Dr. Ogemah V	PhD, MMUST	A Digital Imaging Model for Plant Stress Detection	Graduated Dec'20		
4.	Dr. Samson Munialo Supervisors: Prof Muchiri & Dr. Omieno	Supervisors: Prof Muchiri & <b>Dr.</b> Method for Service-Oriented Architecture		Graduated Dec'20		
5.	Dr. Obadiah Matolo Musau Supervisors: Dr. Omieno K & Dr. Angulu R	PhD, MMUST	Machine Learning Model for Prediction of Students' Academic Performance, Kenya	Graduated Dec'20		
6.	<b>Dr. Michael Okumu Ujunju</b> Supervisors: <b>Dr. Omieno K</b> & Prof. Ogara S.	PhD, MMUST	An Algorithm for Resources Use in Multi- Tenant Cloud Computing Application Environment	Defended May' 21		
7.	Mr. Augustine Prince Ngomeh Supervisors: Dr. Omieno & Dr. Mbuqua	Ngomeh Supervisors: Dr. Omieno & Dr.		Graduated Dec'18		
8.	Mr. Hillan Rono Supervisors: Dr. Omieno & Dr. Mutua S	MSc, MMUST	An Interoperability Framework for E- Government Heterogeneous Information Systems, Kenya	Graduated Dec'18		
9.	Mr. Victor Kadima Supervisors: Dr. Omieno & Dr. Mbugua	MSc, MMUST	A Model for Cyber Security Vulnerability Assessment in County Governments, Kenya	Graduated Dec'18		
10.	Mr. Samuel Shitote Supervisors: Dr. Omieno & Dr  MSc, MMUST Optimization of Content Management System to Improve Website Ranking in		Optimization of Content Management System to Improve Website Ranking in Organizations, Kenya	Graduated Dec'18		
11.	Mr. Dickson Waliaro Supervisors: Dr. Omieno K& Dr. Ondulo J	MSc, MMUST	A Model to Measure Functional Suitability of Enterprise Processing Systems in Kenyan Universities	Graduated Dec'20		
В	Ongoing Postgraduate Students					
12.	Mr. Ayub Shirandula Supervisors: <b>Dr. Omieno</b> , & Dr. Ondulo J	PhD, MMUST	Enhanced Model for Adoption of E- Health Services, Kenya	Writing Drat Thesis		

13.	Mr. Shadrack Metto Supervisors: <b>Dr. Omieno</b> , & Dr. Ondulo J	PhD, MMUST	A Model for Security in Internet of Things for Smart Homes	Writing Draft Thesis
14.	Mr. Hillan Ronoh Supervisors: Odawa J & <b>Dr.</b> <b>Omieno</b> .	PhD, MMUST	A Smart Contract Based Model on Blockchain Application for Tea Supply Chain Management, Kenya.	Proposal Approved by DPS
15.	Mr. Benjamin Kiprono Supervisors: <b>Dr. Omieno</b> , & Dr. Ondulo J	PhD, MMUST	Modelling Disruptive Technologies Adoption in Banking Sector, Kenya	Proposal Approved by DPS
16.	Mr. Geoffrey Nyongesa Supervisors: <b>Dr. Omieno K</b> & Dr. Otanga D	MSc, MMUST	Chatbot Adoption Model for Customer Care Support in Telecommunication Industry, Kenya	Thesis Under Examination
17.	Ms. Harriet Wangui Supervisors: <b>Dr. Omieno K</b> & Dr. Angulu R	MSc, MMUST	A Framework to Measure Functionality of E-Learning Systems in Kenyan Universities	Writing Draft Thesis
18.	Mr. Philemon Namusenda Supervisors: Dr. Otanga D.& Dr. Omieno K	MSc, MMUST	Framework for Cloud-Based Adoption of E- Voting System, Kenya	Approved by SGSC
19.	Ms. Jackline Waburaka Shikunyi Supervisors: Dr. Ondulo J.& Dr. Omieno K	MSc, MMUST	Implementation Architecture for E- Health In Public Healthcare Facilities	Approved by SGSC
20.	Ms. Perez Nelima Supervisors: <b>Dr. Omieno K</b> & Dr Angulu R.	PhD, MMUST	Model to Measure Smart Device User Satisfaction in Selected Counties in Kenya	Writing Proposal

#### 6.1.5. Thesis Examination

### I have examined the following Master thesis in areas related to Information Technology: -

- 1. Kevin Agina Onyango (Murang'a University of Technology, 2021)- A Metrics-Based Fuzzy Logic Model for Predicting the Reusability of Object-Oriented Software-MSc
- 2. Dorcas Gicuku Mwigereri (MMUST, 2018)- An Enhanced J48 Algorithm for Breast Cancer Diagnosis-MSc
- 3. Philip Kipkurui Bittok (MMUST, 2017)- Critical Success Factors for Adoption of Cloud Computing in National Referral Hospitals in Kenya-MSc
- 4. Perez Nelima (MMUST, 2016)- Enhanced Model to Measure Information Systems User Satisfaction in Kenyan Universities-MSc
- 5. Abdi Halima (MMUST, 2016)- Influence of Information Communication Technology on dissemination of agricultural market information to vegetable farmers in Vihiga County,
- 6. Khanda Jackson (MMUST, 2016)- A Framework for Mobile Payment Adoption in Kenyan Secondary Schools-MSc
- 7. Bethwel Kipchirchir Okello (MMUST, 2015)- Evaluation of the Learnability Principles of Mobile-Wireless Information Systems' Application Software for Children in Kenya-MSc
- 8. Kabii Cosmas Muthama (MMUST, 2015)- A Framework to Evaluate the Impact of Open-Source Software in a software Market in Kenya-MSc
- 9. Emily Tarus (MMUST, 2015)- Contribution of ICT to Extension Service Delivery for Horticulture Farmers in Uasin Gishu County, Kenya-MSc
- 10. Chebet Willyster Mibei (MMUST, 2014)- Integrating Computer Technology in learning Cell Biology in Secondary Schools in Kenya-MSc

- 11. Peter Soita (MMUST, 2014) Factors Affecting Software Project Implementation in Public Universities-MSc
- 12. Over 10 Master's Thesis of Jomo Kenyatta University of Agriculture and Technology

### 6.1.6. Student Innovations/ Projects

Previously Lead Software Incubation Research Group (SIRG'17) hosted in the School of Computing and Informatics, MMUST. Some of the successful Innovations include:

- KTN Leo 19th March 2018 Makala ya Teknohama: Mwanafunzi wa MMUST aunda teknolojia mpya: Accessible Via <a href="https://www.youtube.com/watch?v=6lkLpqZHCag">https://www.youtube.com/watch?v=6lkLpqZHCag</a>
- Teknohama: Uvumbuzi unaotumia ujumbe wa simu kujua waliofika shuleni: Accessible via https://www.youtube.com/watch?v=D17MF4beUMs
- Student Helper; Online eLearning with attendance; & SmartHealthCare amongst others

#### **6.2. FUNDED RESEARCH PROJECTS & CONSULTANCIES**

#### 6.2.1 Research Interests

ICT4D, Technology-Supported Learning, Data Science, Health Informatics and Visual Analytics

#### 6.2.2. Research Projects

- 1. Grant Proposals Applied:
- ❖ PI: (Dr. Omieno, Prof. Amadalo and Mr. Shirandula): A Cloud-Based E-Learning Implementation Model for Universities, Kenya. Funded by Kaimosi Friends University College Research Fund (UCRF) for 2019/2020 FY; Amount Granted: KShs. 1.3M.
- 2. Current Successful Grant Projects
- PI: (Dr. Omieno, Prof. Obiri, Dr. Mulinya, Dr. Mugeni, Dr. Manyali, Mr. Mabele): A Research Centre on "GIS and Remote Sensing "Approved for Funding by Lake Region Economic Block (LREB) at Kaimosi Friends University College;
- ❖ PI: (Team Leader): Implementing Technology-Enabled Learning (TEL) and Using Commonwealth Digital Education Leadership Training in Action (C-DELTA) as a Non-Credit Course at Kaimosi Friends University College. Funded by Commonwealth of Learning (COL), Geneva 2019/2020 FY; Amount Granted: KShs. 1.1M. Output (s):
  - Report on the Baseline Study of Technology-Enabled Learning at Kaimosi Friends University College is made available under a Creative Commons Attribution-Share Alike 4.0 Licence (international): <a href="http://creativecommons.org/licences/by-sa/4.0">http://creativecommons.org/licences/by-sa/4.0</a> &
  - 2. Technology Enabled Learning (TEL) Policy of KAFUCO approved by Council.
- Co-PI: (Dr. Mugeni G, Prof Wabwoba F, Dr. Omieno K, & Prof. Karume S): A Multi-Disciplinary Research Grant Proposal by the title "A Model and Implementation Framework for Internet of Things (IoT) Based Big Data Analytics System for Disaster Prediction and Management", Funded by National Research Fund-Kenya (NRF) in 2016/207 FY; Amount Granted: KShs. 10.8M

#### 3. Previous Projects

- Co-Researcher where PI-Dr. Karume S. (Former Director ICT, MMUST): UNESCO-HP, Developing "E-learning Content" for E-waste management program (August 2011 to November 2014).
- Research Assistant where PI-Dr. K'Owino I, Dr. Karume S. HP Catalyst Initiative, Masinde Muliro University of Science & Technology Computational Chemistry Grid project: "Virtual Chemistry Lab- simulators" (September 2011 to August 2014)

#### 6.2.3. Consultancies, Research & Community Outreach

- 1. **2019/20-2020/21** FYs: Appointed Pre-Qualified Resource Person, Kenya National Qualification Authority by Director General/CEO, Kenya: <a href="http://www.knqa.go.ke/">http://www.knqa.go.ke/</a>
- 2. **October 2019 to Date**: Appointed Board Member, Wanga Technical and Vocational College (Wanga TVC) Kakamega County by Cabinet Secretary, Ministry of Education
- October 2018 to Date: Appointed Board Member, Makunda Mixed Secondary School, Ministry of Education, Busia County
- 4. **21st-22nd February 2019**: Facilitator for the Big 4 Agenda Workshop, to write Grant Proposals for MMUST. Organized by Directorate of Research and Postgraduate Support, Busia County
- 5. **May 2018-February 2019: Secretary**, Budalang'l Educational Needs Assessment Task Force- by Hon. Raphael Wanjala, MP-Budalang'i
- 6. **April 2018: Consultant**: Developed BSc in Information Technology programme for Umma University.
- 7. **Jan 2017-Jan 2019: Chairperson, Software** Incubation Research Group" SIRG'17 MMUST.
- 8. **Developed** Draft MMUST Anti-Plagiarism Policy and approved by ICT/Library Committee and MMUST Senate.
- 9. Developed Kibabii University Webisite, Kibabii University Website (www.kibu.ac.ke)

## **6.3. ADMINISTRATION AND RESPONSIBILITIES & ACHIVEMENTS**

A. Dean, School of Computing and Information Technology (SCIT), Kaimosi Friends University College (1st February 2019 to Present)

### **Duties/ Responsibility**

- 1. Articulating and Implementing the Mission and Objectives of the School
- 2. Convening and Chairing School Board Meetings
- 3. Represent the School of Computing in the Deans Committee, Senate and other Boards of the University as required
- 4. Promoting and maintaining a conducive working environment within the School
- 5. Planning and Budgeting for the School
- 6. Preparing School of Computing and Informatics reports
- 7. Overseeing Examinations as Chief Examiner in the School

- 8. Managing Academic Programmes in the School as required by Senate
- 9. Supervising and Appraising the performance of academic and other staff in the School
- 10. Making recommendations with respect to discipline, probation, advancement, and promotion of academic staff within the School

### **Some of Achievements**

- 1. Developed MSc in Information Systems and Technology and Bachelor of Business Information Technology programmes- Awaiting Approval by relevant University Organs.
- 2. Spearhead Review of Certificate, Diploma, BSc and MSc in IT Programmes in the SCIT
- 3. Developed Proposal on Strategic Plan for the School of Computing and Information Technology- Approved by UCMB
- 4. Spearheaded the Development and Approval of Reviewed 2018/19-2022/23 Strategic Plan for Kaimosi Friends University College
- 5. Reviewed and facilitated approval of the ODeL Policy, and related regulations of Kaimosi Friends University College by University College Academic Board
- 6. Developed an E-Waste Management Policy for the ICT Department
- 7. Developed Policy on Examination Management, Invigilation and Marking and approved by University College Academic Board
- 8. Developed KAFUCO Scholarship Policy approved by University College Academic Board
- 9. Oversaw the creation of new Website with new look and appeal for Kaimosi Friends University College. www.kafuco.ac.ke

## B. Chairman of UCAB and UCMB Committees on Policies Development and Review, Kaimosi Friends University College (From Date of Appointment to Present)

Spearheaded Development and Review of Policy Framework of University College:

- 1. PSSP Policy
- 2. Endowment Policy
- 3. Scholarship Policy
- Part time Management Policy
- 5. Anti-Plagiarism Policy
- 6. Allowances Policy
- 7. Revised [2021] Risk Management Policy
- 8. Revised [2021] Procurement and Disposal Policy
- 9. Revised [2021] Examinations Policy and Procedures
- 10. Revised [2021] Fees Policy and Guidelines
- 11. Revised [2021] Corruption Prevention Policy
- 12. Revised [2020] KAFUCO Statutes
- 13. Revised [2020] Schemes of Service
- 14. Revised [2020] Human Resource Manual
- 15. Revised [2020] KAFUCO 2018/19-2022/23 Strategic Plan
- 16. Library Use Policy
- 17. Risk Management Policy
- 18. Finance Policy and Procedures
- 19. Procurement and Disposal Manual and Procedures
- 20. Open Access Institutional Repository Policy
- 21. Information Literacy Policy

- 22. Technology Enabled Learning (TEL) Policy
- 23. Open Distance and eLearning Policy
- 24. Students Accommodation Policy and Guidelines
- 25. E-Waste Management Policy
- 26. University Health Services Policy and Guidelines
- 27. Third-Party Student Accommodations and Welfare Arrangements Policy
- 28. Library Strategic Plan 2019/20-2022/23
- 29. Postgraduate Policy and Postgraduate Procedures and Guidelines
- 29. Examination Management Policy
- 30. KAFUCO Student Organization Constitution
- 31. Teaching, Marking and Invigilation policy

## C. Ag. Dean, Deputy Principal (Academic and Student Affairs), Kaimosi Friends University College (1st July 2019 to19th July 2019)

### **Duties/ Responsibility**

- 1. Articulating and Implementing the Mission and Objectives of the Division Convening and Chairing Deans Committee Meetings
- 2. Promoting and maintaining a conducive working environment within the Division Promote Research and partnership
- 3. Managing Academic Programmes in the Vision as required by Senate
- 4. Supervising and Appraising the performance of academic and other staff in the Division

#### Some of Achievements

- 1. Developed Policy on Teaching, Marking and Invigilation- Approved by Council
- 2. Developed Postgraduate policy and guidelines- approved by UCAB and Council
- 3. Developed Examination management guidelines, KAFUCO- Approved by UCAB and Council

## D. Ag. Dean, School of Computing and Informatics, Masinde Muliro University of Science and Technology (3rd January 2017 to January 2019)

### **Duties/ Responsibility**

- Articulating and Implementing the Mission and Objectives of the School Convening and Chairing School Board Meetings
- b. Represent the School of Computing in the Deans Committee, Senate and other Boards of the University as required
- c. Promoting and maintaining a conducive working environment within the School Planning and Budgeting for the School
- d. Preparing School of Computing and Informatics reports
- e. Overseeing Examinations as Chief Examiner in the School
- f. Managing Academic Programmes in the School as required by Senate
- g. Supervising and Appraising the performance of academic and other staff in the School Making recommendations with respect to discipline, probation, advancement, and promotion of academic staff within the School

#### **Some of Achievements**

- 1. Initiated & Developed New Academic Programmes:
  - a. MSc in Computer Science Degree Senate Approved November, 2018

- b. Draft Bachelor of Science in Computer Security and Forensics Senate Approved November, 2018
- c. TVET Diploma programmes and enlisted for 2019/2020 KUCCPS Intake: Diploma in Software Development and;
- d. Diploma in Technology in Computer Systems Approved by Senate and TVETA
- 2. **Developed** Short Courses approved by SOLACE Board namely:
  - a. Certificate in Project management;
  - b. Certificate in Data Analysis and Presentation;
  - c. Certificate in Mobile Application Development;
- 3. Developed Draft Postgraduate Programmes:
  - a. MSc in in Information Systems and;
- 4. **Established** a working Memorandum of Understanding (MOU) between University of Nairobi-School of Computing and Informatics and MMUST-School of Computing and Informatics and County Government of Kakamega-CHMT
- 5. **Chaired a Senate Committee** in Writing Report that led to Restructuring of the Directorate of Postgraduate Studies (DPS), ODeL and SOLACE for Effective and Efficient Service delivery
- 6. **Developed** School of Computing and Informatics 2016-2020 Strategic Plan
- 7. **Initiated & Developed** proposal creating Research Group known as "**Software Incubation Research Group**" SIRG'17 and became the first Chair of the Research Group
- 8. **Revised Curriculum** for Bachelor of Technology Education (Computer Studies) and Approved by Senate on 13<sup>th</sup> January 2017.
- 9. **Involved** in the recruitment of Prof. John Gallagher (from UK) as Adjunct Professor of Computer Science and other adjunct Professors

# E. Chairman, Department of Computer Science, Masinde Muliro University of Science and Technology (21th August 2014 to 2nd January 2017)

## **Duties/ Responsibility**

Articulating and Implementing the Mission and Objectives of the Department Convening and
chairing Departmental Board Meetings
Represent the Department in the Faculty, School, Institute, Centre or Board, Senate and
other Boards of the University as required
Promoting and maintaining a conducive working environment within the Department Planning
and Budgeting for the Department Preparing Departmental reports
Overseeing Examinations as Chief Examiner in the Department
Managing Academic Programmes in the department as required by Senate
Supervising and Appraising the performance of academic and other staff in the Department
Making recommendations with respect to discipline, probation, advancement, and promotion
of academic staff within the Department

#### **Some of Achievements**

- 1. **Spearheaded** the Creation of School of Computing and Informatics (SCI) of Masinde Muliro University of Science and Technology.
- 2. Developed Undergraduate and TVET Diploma Programmes:
  - a. BSc in Information Systems and Knowledge Management for MMUST with first KUCCPS Admission (intake) in September 2016/2017 academic year.
  - b. Bachelor of Technology Education (Computer Studies) with first KUCCPS intake in Sept. 2016/2017
  - c. Diploma in Technology in Computer Systems with first intake in 2019/2020
  - d. Diploma in Software Development with first intake in 2019/2020
- **3.** Ensured resumption of admission of MSc and PhD students in IT, at MMUST and currently has many postgraduate studies

- **4. Spearheaded Review of Existing P**rogrammes as per Commission for University Education Regulations and Guidelines:
  - a. BSc in Computer Science and BSc in Information Technology,
  - b. Postgraduate programmes: MSc in IT and PhD in IT
- **5. Registered** MMUST as an Oracle Academy
- **6. Spearheaded** the recruitment of 3 Adjunct Professors in Computer Science: Prof. Patrick J. Ogao (Kenya), Prof. Sunday O. Ojo (SA) and Prof. Olugbara Oludayo (SA)

## F. Ag. Dean, Faculty of Science, Masinde Muliro University of Science and Technology (25th November 2014 to 28th November 2014)

- Attend university meetings
- Chaired 1st Ad-Hoc Committee Meeting organizing for the 1st International Conference to be held in 2015

## G. Ag. Chairman, Department of Computer Science, Masinde Muliro University of Science and Technology (12th July 2014 to 20th August 2014)

- Attend senate meetings
- Convening and Chairing Departmental Board Meetings
- Represent the Department in the Faculty, School, Institute, Centre or Board, Senate and other Boards of the University as required
- Promoting and maintaining a conducive working environment within the Department
- Planning and Budgeting for the Department
- Preparing Departmental reports

## H. Ag. Chairman, Departmental Graduate Studies Committee, Depart. of Computer Science (Jan. 2014 to August 2014)

#### **Duties/ Responsibility**

- Chairing DGSC meetings
- Board Member, School of Graduate Studies
- Scheduling for DGSC board meeting by Liaising with Chairman, Computer Science Dept.
- · Organizing for graduate seminars during the period

#### Some of Achievements

- Organized three (3) departmental graduate seminars
- 6 Phd students graduated and several masters students in July 2014 and Dec 2014 graduation.

## I. Secretary to Departmental Graduate Studies Committee, Depart. of Computer Science (March. 2013 to August 2014)

- Writing Minutes of DGSC proceeds
- Scheduling for DGSC board meeting by Liaising with Chairman, DGSC
- J. Coordinator, Research and Publications, Computer Science Dept. (March 2013 August 2014)
  - Organizing for departmental seminars and workshops
  - Coordinating research work in the department including postgraduate research
  - Coordinating exhibitions by department
  - Organizing research publications in the department
  - Coming up with proper ISO procedures and documents to aid in effective processing of postgraduate proposals and thesis, in the department.

## K. Member, Seminars and Workshops, Faculty of Science-MMUST (March 2013-to Nov. 2014)

- Organizing for seminars and workshops in the faculty of science
- · Developing strategic plan for seminars and exhibitions in the faculty
- Assembling and disseminating research publications by the faculty members

## L. Departmental Publication, Conference, Workshops and Exhibitions coordinator, MMUST (Feb. 2011 – Feb. 2013)

- Involved in organizing ICT conference at MMUST
- Organizing publications and exhibitions in the department

### M. Secretary, MMUST Innovation Team (2012 to January 2014)

 Aimed at creating University short programs on innovation, Leadership and Professional development and ICT & Pedagogy

## N. Departmental Examinations Coordinator (2010/2011 Academic year)

 Diploma and Certificate examinations where there was streamlining of overall examination processing in the department, MMUST

#### 7. PROFESSIONAL AFFILIATIONS AND OTHER ACTIVITIES

- Professional Member, Association of Computing Machinery (ACM) <u>www.acm.org</u>
   Member No: 5904126
- Member, Internet Society,

www.internetsociety.org Member No: 2192217

#### 8. PUBLICATIONS, CONFERENCES AND WORKSHOPS

## 8.1. PUBLICATIONS AS SENIOR LECTURER

### 8.1.1. Books, Book Chapters & Modules

1. Book Chapter:

Omieno K. K (2020). Evaluating the Usability Maturity of Enterprise Resource Planning Systems in "Metrics and Models for Evaluating the Quality and Effectiveness of ERP Software." DOI: 10.4018/978-1-5225-7678-5.ch008, Pg 171-199, IGI Global. Link: <a href="https://www.igi-global.com/chapter/evaluating-the-usability-maturity-of-enterprise-resource-planning-systems/232355">https://www.igi-global.com/chapter/evaluating-the-usability-maturity-of-enterprise-resource-planning-systems/232355</a>

## 8.1.2. Refereed Journal papers

- Munialo S. W; Muketha G. M & Omieno K K (2020). An Effort Estimation Method for Service-Oriented Architecture. Journal of Engineering Science and Technology Review, ISSN:1791-2377. 13(6) 2020 Pp:187-196 doi:10.25103/jestr.136.25
- Geoffrey Nyongesa, Kelvin Omieno, Daniel Otanga, "Artificial Intelligence Chatbot Adoption Framework for Real-Time Customer Care Support in Kenya", International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), ISSN: 2456-3307, Volume 6, Issue 6, pp.100-117, November-December-2020. Available at doi: https://doi.org/10.32628/CSEIT20667 Journal URL: http://ijsrcseit.com/CSEIT20667

- Mugeni, G. B., Omieno K.K.; Wabwoba F; Karume S. M; Mabele L; & Otanga D. (2020). Determinants for the Adoption of Internet of Things (IoT) for Flood and Drought Disaster Management in Kenya. ISJ Theoretical & Applied Science, 09 (89), 342-354.Soi: http://s-o-i.org/1.1/TAS-09-89-43 Doi: https://dx.doi.org/10.15863/TAS Scopus ASCC: 2000
- Michael Okumu Ujunju, Solomon Ogara, Kelvin Omieno (2020). Cloud Computing Model for Enhanced Resource Usage in Multi-Tenant Application Environment. *International Journal of Computer Trends and Technology*, ISSN: 2231-2803, 68(9), 45-52.
- 5. **Omieno K. (2020).** A Post Covid-19 E-Learning Strategy Based on Usability Maturity Model for Higher Learning Institutions, Kenya. *IJCAT-International Journal of Computing and Technology, ISSN: 2348-6090 Vol 7 Issue 7, pp. 115-122, July 2020.*
- 6. Munialo S.; Muketha G. & Omieno K (2020). Automated Feature Extraction from UML Images to Measure SOA Size. International Journal of Recent Technology and Engineering (IJRTE), ISSN (e): 2277-3878 Vol 9 Issue 2 July 2020.
- 7. Ndia G. J.; Muketha M. G. & **Omieno K. K (2020).** Structural Complexity Attribute Classification Framework (SCACF) for Sassy Cascading Style Sheets. *International Journal of Software Engineering & Applications (IJSEA)*, | *Volume 11, Issue 1, January 2020*|DOI: 10.5121/ijsea.2020.11105
- 8. Kadima V. C & Omieno K. K (2020). Effective Deployment of ICT's in Management of Medical Laboratory Services in Kenya. *International Journal of Innovative Science and Research Technology, ISSN -2456-2165. Volume 5, Issue 1, pp. 1395-1403, January 2020*
- 9. Musau O. M., **Omieno K**; and Angulu R (**(2019)**. Towards Prediction of Students' Academic Performance in Secondary School Using Decision Trees. *International Journal of Research and Innovation in Applied Science (IJRIAS)*, vol. IV, no. X, pp. 85-89, October 2019.
- Musau M.O.; Omieno K & Angulu R. (2019). Factors Affecting Secondary School Students'
   Academic Performance, Kenya. International Journal of Research and Innovation in Applied
   Science (IJRIAS) | Volume IV, Issue IX, September 2019 ISSN 2454-6194
- 11. Ndia J G.; Muketha G.M & Omieno K K (2019). Complexity Metrics for Sassy Cascading Style Sheets. Baltic J. Modern Computing, Vol. 7 (2019), No. 4, 454-474 https://doi.org/10.22364/bjmc.2019.7.4.01
- 12. Waliaro, D. O., **Omieno K.** & Ondulo J. **(2019).** Analysis of Software Quality Models for ERP Software Use in University in Kenya. *International Journal of Advanced Research in Computer and Communication Engineering.* (E-ISSN 2278-1021/ ISSN 2319 5940) Vol 8. No.10 October 2019 pp:58-61 DOI 10.17148/IJARCCE.2019.81009
- 13. Kirongo C.; Omieno K; Mutua M. & Ogemah V. (2019). Plant Stress Detection Accuracy Using Deep Convolution Neural Networks. International Journal of Scientific Research in Computer Science, Engineering and Information Technology. ISSN (e): 2456-3307. Vol 5 Issue 4 July-August 2019. Pp: 263-270.
- Ndia, John Gichuki and Muketha, Geoffrey Muchiri and Omieno, Kelvin Kabeti, A Survey of Cascading Style Sheets Complexity Metrics (May 31, 2019). International Journal of Software Engineering & Applications (IJSEA), Vol.10, No.3, May 2019, Available at SSRN: https://ssrn.com/abstract=3405783 or http://dx.doi.org/10.2139/ssrn.3405783

15. Munialo S.; Muketha G. & Omieno K (2019). Size Metrics for Service Oriented Software. IJCAT-International Journal of Computing and Technology ISSN (e): 2348-6090 Vol 10 Issue 12 March 2019.

### 8.1.3. Conference Presentations

 Omieno, K.K (2019). A Model for Knowledge Management Strategy: An Application in Health Care System, Kenya. KIBU International Conference (2019). Enhancing Food Security and Universal Health Care for Sustainable Development. Book of Abstracts of Kibabii University 4thInternational Conference 12th- 14th June 2019. Kibabii University Main campus, Bungoma Kenya. ISBN: 978-9966-59-020-6

#### **8.2. PUBLICATIONS AS LECTURER**

## 8.2.1. Books, Book Chapters & Modules

- Omieno K. & Matoke N (2014). Fundamentals of Computing: A Simplified Approach. A University Teaching Book. Published by Scholar's Press, ISBN: 978-3-639-70591-1
- 2. **Omieno K**, Otanga D, & Rambim D **(2015)**. BCS 110-Fundamentals of Computing-University- wide e-Module. Published by Masinde Muliro University of Science & Technology

#### 8.2.2. Refereed Journal papers

- Ondimu K.O., Omieno K.K. Muchiri M.G & Lukandu A.I (2018). Tackling Data Related Challenges in Healthcare Process Mining Using Visual Analytics. IJCAT-International Journal of Computing and Technology ISSN (e): 2348-6090 Vol 5 Issue 10 October 2018.
- 2. Kadima V.C.; Mbugua S & **Omieno K.** (2018). Facilitating Factors for Cybersecurity Vulnerabilities in Kenyan County Governments. *Asian Journal of Research in Computer Science* 2(1): 1-11, 2018; Article no.AJRCOS.45049
- 3. Ronoh H., **Omieno K.** & Mutua S. **(2018).** An Interoperability Framework for E-government Heterogeneous Information Systems. *International Journal of Advanced Research in Computer and Communication Engineering.* (E-ISSN 2278-1021/ ISSN 2319 5940) Vol 7. No.11 November 2018 pp:115-126 DOI 10.17148/IJARCCE.2018.71025
- Shitote S., Omieno K. & Ondulo J. (2018). Investigating optimization Strategies that Determine Performance of CMS Websites in Organizations. International Journal of Advanced Research in Computer and Communication Engineering. (E-ISSN 2278-1021/ ISSN 2319 5940) Vol 7. No.11 November 2018 pp:97-102 DOI 10.17148/IJARCCE.2018.71022
- 5. Ondimu K.O., Muchiri M.G, Lukandu A.I & **Omieno K.K.** (2018). A Situational Method for Healthcare Business Process Improvement. *International Journal of Research in Engineering and Technology. ISSN* (e): 2319 1163 ISSN (p): 2321 7308 Vol 7 Issue 10 October 2018
- 6. Shirandula A. & Omieno K.K. (2018). A Development Approach for Successful Adoption of Information Technology in Agriculture. *The International Journal of Engineering and Science. ISSN (e): 2319 1813 ISSN (p): 2319 1805 Vol 7 Issue 8.*
- 7. Ngomeh A. W. P, **Omieno K.K**. & Mbuguah S. **(2018)**. Evaluation of Guidelines for Security Threats in Mobile-Phone Banking. *International Journal of Engineering and Mathematical Sciences January June 2018, Volume 13, Issue 1, pp.47 53. ISSN (Print) 2319 4537, (Online) 2319 4545.*
- 8. Omieno K.K. (2017). An Approach to Evaluate Usability Maturity of e-Learning Systems: A User's Perspective. IRACST-International Journal of Computer Science and Information Technology & Security. ISSN 2319 5940 Vol 5. November- December 2017 Issue

- 9. Omieno K.K & Rodriguez A. (2016). Usability Maturity Model and Assessment Tool for Virtual Learning Systems. International Journal of Advanced Research in Computer and Communication Engineering. (E-ISSN 2278-1021/ ISSN 2319 5940) Vol 5. No.12 December 2016 pp:78-84 DOI 10.17148/IJARCCE.2016.51217
- 10. Omol, E.J., Abeka, S.O & Omieno K.K. (2016). Relevance of Demographic profile on Acceptance of Mobile Money Payment in Enterprise Management. A Case of MSEs in Kisumu City, Kenya. MR Journal of Information Science and Technology; ISSN: 2518-8844. Vol. 1, No. 1, pp. 35 - 43.
- Omol, E. J., Abeka, S. O., Ogalo, J. O. & Omieno, K.K. (2016). Mobile Money Payment Acceptance Model in Enterprise Management: A Case Study of MSE's in Kisumu City, Kenya. MR Journal of Information Science and Technology; ISSN: 2518-8844. Vol. 1, No. 1, pp. 1 – 12
- Omieno K.K, Raburu P. & Raburu G. (2015). Performance-Based Usability Maturity Assessment Framework for VLS in Universities. International Journal of Advanced Research in Computer and Communication Engineering. (E-ISSN 2278-1021/ ISSN 2319 5940) Vol 4. No.12 December 2015 pp:6-14 DOI 10.17148/IJARCCE.2015.41202
- 13. Shirandula A.H; Rono L. & **Omieno K (2015).** Evolving Information Technology: Opportunities and Challenges. *International Journal of Computers and Technology.* ISSN:2277-3061 Volume 14 No. 8,May-2015 pp: 6001-6008
- 14. Omieno K.K, & Raburu G. (2014). Usability Maturity Indicators for Virtual Learning Systems. Journal of Emerging Trends in Computing and Information Sciences. (E-ISSN 2218-6301/ISSN 2079-8407) Vol 5. No.5 May 2014 pp:377-382
- 15. Kitone K.M & Omieno K.K (2013). Role of Information Systems in Organizational Business Process. International Journal of Management and Information Technology. ISSN:2278-5612 Volume 8 No. 1,Dec-2013 pp: 1214-1220 http://cirworld.com/index.php/ijmit/article/view/813200/2225
- Okinyi M. O, Omieno K.K, & Kitone K. M. (2013). The Value of Human Resource Information Systems in Human Resource Management. *International Journal of Computers and Technology. ISSN:2277-3061 Volume 11 No. 10,Dec-2013 pp: 3085-3089 http://cirworld.com/index.php/ijct/article/view/3190*

#### 8.2.3. Past Conference Presentations

- 1. **Omieno, K.K (2018).** Role of ICT in Improving Quality of Education in Kenya. *World Conference on Transformative Education, 26th- 2018th July 2018, MMUST.*
- 2. **Omieno, K.K (2018).** Effective Adoption Indicators of Management Information Systems in the Kenya's Economy. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17th-22nd June 2018 ISBN*:978-9966-114-73-0
- 3. Omieno, K., Ogara S & Ronoh H. (2018). A Review of Cybercrime Law and Practice: A Kenya's Perspective. First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17th-22nd June 2018 ISBN:978-9966-114-73-0
- 4. Munialo S &, **Omieno, K. (2018).** A Review of Software Effort and Cost Estimation Methods. First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17th-22nd June 2018 ISBN:978-9966-114-73-0
- Ronoh H., Omieno, K. & Mutua S. (2018). Expandability of e-Government Heterogeneous Information System database to achieve Interoperability. First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17th-22nd June 2018 ISBN:978- 9966-114-73-0
- 6. Shitote S & **Omieno**, **K.** (2018). Investigating factors that determine performance of content management systems for effective dissemination of knowledge in organizations. *First Pan*

- African International Research Congress on Knowledge Generation and Dissemination in Africa, 17th- 22nd June 2018 ISBN:978-9966-114-73-0
- 7. Ondimu K., Muchiri G., **Omieno, K.** & Lukundu I. **(2018)**. Improving the Healthcare Process: A Process Mining and Visual Analytics Approach. *First Pan African International Research Congress on Knowledge Generation and Dissemination in Africa, 17th-22nd June 2018 ISBN*:978-9966-114-73-0
- 8. **Omieno, K.K,** Raburu G, Raburu P **(2015).** A Usability Maturity Framework for Virtual Learning Systems. International Conference ...., *JOOUST 7th and 8th June 2015*

#### 8.3. PUBLICATIONS AS ASSISTANT LECTURER

### 8.3.1. Books, Book Chapters & Modules

- Kelvin Omieno (2013). Rapid Application Development. A University teaching module. E-Learning Model, Published by Masinde Muliro University of Science & Technology
- Kelvin Omieno (2012). A Framework to Measure Intranet Usage in Kenyan Public Universities: Concepts, Design and Practices of Intranet usage. LAP Lambert Academic Publishing. ISBN: 978-3-659-22565-9

#### 8.3.2. Refereed Journal Papers

- Omieno K.K, Oenga L. & Raburu G. (2013). Usability Maturity Model for VLS: Conceptual Framework. International Journal of Computers and Technology. ISSN:2277-3061 Volume 6 No. 2,May-2013 pp: 317-320 http://cirworld.com/index.php/ijct/article/view/1229
- 2. **Omieno K.K** & Oenga L & Matoke N. (2013). The Use of Social Networking Sites in Education. Accepted for publication in *International Journal of Computers and Technology*. *ISSN*:2277-3061
- 3. Wabwoba F., Mutua S. M & **Omieno K.K**. (2013). A review of the role of Information and Communication Technology in meeting the millennium development goals and the vision 2030 in Kenya. *East Africa Journal of Engineering, Science and Technology. Vol.1 No.2 ISSN:* 2219-8598 Pp: 127-133
- 4. Omieno K.K, Wabwoba F. & Matoke N. (2013). Virtual Reality in Education: Trends and Issues. International Journal of Computers and Technology. ISSN:2277-3061 Volume 4 No. 1, Jan Feb, 2013 pp: 38-43 http://cirworld.com/index.php/ijct/article/view/717
- Wabwoba F., Wanyembi G., Omuterema S. & Omieno K. (2013). Green ICT Readiness
   Model for Developing Economies: Case of Kenya. 22(IJACSA) International Journal of
   Advanced Computer Science and Applications. U.S ISSN: U.S 2156-5570(Online)
   ISSN: 2158-107X(Print) Vol. 4, No.1. http://thesai.org/Downloads/Volume4No1/Paper\_8 Green\_ICT\_Readiness\_Model\_for\_Developing\_Economies\_Case\_of\_Kenya.pdf
- 6. **Omieno K. K** & Khabamba I (2012). ICT in Disaster Risk Reduction: Kenyan Experience. International Journal of Disaster Management and Risk Reduction. ISSN: 1992-2744 Vol. 4(2). <a href="http://www.admcrk.org/journal/abstract\_14.php">http://www.admcrk.org/journal/abstract\_14.php</a>
- 7. **Omieno K.K**. (2012) Integrating Virtual Reality in Education using Intranet Grids. *IOSR Journal of Engineering. ISSN-2250-3021. Vol. 2(4) pp: 644-649*<a href="http://www.iosrjen.org/Papers/vol2">http://www.iosrjen.org/Papers/vol2</a> issue4/X024644649.pdf
- 8. Omieno K.K. & Wanyembi G. (2012) Managing Knowledge Sharing: Mutual understanding, Strategic Alignment and Contribution of Corporate Intranets in Knowledge Management in

- Kenyan Public Universities. *International Journal of Science and Technology. ISSN-2224-3577.Vol.2.No.1.Pp:51-54 http://ejournalofsciences.org/archive/vol2no1/vol2no1\_8.pdf*
- 9. **Omieno K.K.**, Oteng' S.B.B & Khabamba I. (2012). Towards the negative roles of social networking sites on society. *International Journal of Disaster Management and Risk Reduction. ISSN:* 1992-2744 Vol.4. No.1 http://www.ijdmrr.info/paper 1.pdf

#### 8.4. PUBLICATIONS AS GRADUATE TEACHING ASSISTANT

## 8.4.1. Refereed Journal Papers

- Omieno K.K., Wanyembi G & Mbugua S. (2012) Integrating Virtual Worlds and Virtual Learning Environments in Schools in Developing Economies. *International Journal of Information and Communication Technology Research*. ISSN-2223-4985.Vol.2No.1.Pp:17-21 http://esjournals.org/journaloftechnology/archive/vol2no1/vol2no1\_3.pdf
- Karume S.M & Omieno K.K. (2011). Synergizing E-infrastructures Initiatives to Foster e-Research in Higher Education Institutions in Africa. Journal of Emerging Trends in Computing and Information Sciences. E-ISSN 2218-6301/ISSN:2079-8407.Vol.2.No.11.Pp:632-640 <a href="http://www.cisjournal.org/journalofcomputing/archive/vol2no11/vol2no11\_12.pdf">http://www.cisjournal.org/journalofcomputing/archive/vol2no11/vol2no11\_12.pdf</a>
- 3. Omieno, K. K., Kilwake J.H. & Wabwoba F. (2011) Promoting Quality Outcomes in Higher Education using new Learning Technologies. *Journal of Education and Social Sciences*. *ISSN*:2223-490X, Vol. 1. No.1. Pp: 145-151 (offline)
- Wabwoba F., Omieno K.K., Simiyu C.N. & Sisungo Z.W. (2011). The role of wireless technologies in taking education to rural villages in developing countries. *International Journal of Information and Communication Technology Research*. ISSN-2223-4985.Vol.1No.7.Pp:300-305

http://esjournals.org/journaloftechnology/archive/vol1no7/vol1no7 2.pdf

 Omieno, K.K. & Karume M.S. (2011). Adaptability of intranet grids in HEIs to leverage Africa Connect Initiative. *International Journal of Information and Communication Technology* Research. ISSN-2223-4985.Vol.1No.7.Pp:292-299 http://esjournals.org/journaloftechnology/archive/vol1no7/vol1no7\_1.pdf

## 8.4.2. Refereed Conference Proceedings

- Omieno, K.K., Karume M.S., & .Ogao J.P (2011) A framework to measure intranet Usage in HEIs: A case of Selected Kenyan Universities. Proceedings of 7th International Conference on Computing and ICT Research in Special Issues on ICT for Development 2011.ISSN:2223-490-8-1.Pp-182-197 http://cit.mak.ac.ug/iccir/downloads/ICCIR11.pdf
- Omieno, K.K., Karume M.S., & .Ogao J.P (2011) The Grid as a driving force for e-learning and OERs. Proceedings of 7th International Conference on Computing and ICT Research in Special Issues on ICT for Development 2011. ISSN: 2223-490. Pp-298-312. http://cit.mak.ac.ug/iccir/downloads/ICCIR11.pdf
- 3. Karume S., & Omieno K. (2011). Grid computing technology as a driving force for E-learning and Open Educational Resources in Africa. *IST-Africa 2011 Conference Proceedings, Paul Cunningham and Miriam Cunningham (Eds), IIMC International Information Management Corporation, 2011, ISBN:* 978-1-905824-24-3

4. Omieno, K.K. (2010). ICT for Information economy through network-optimized computing. Proceedings of the 1st Engineering, Science and Technology conference, Kenya 2010. ISBN: 9966-779-11-6. pp: 156-160

### 8.4.3. Conference Paper Presentations

- Omieno, K.K., Khabamba I 2012. ICT in Disaster Risk Reduction: Kenyan Experience. International conference of Disaster Risk Reduction and Conflict Resolution for Sustainable Development 18th-20th July, 2012, MMUST, Kenya
- Omieno K.K. & Wanyembi G 2012. Corporate Intranet as a vital tool for Knowledge management in Kenyan Universities. 13th Strathmore University Annual ICT Conference. ICT and Society: Adaptive Computing and Technologies. 7th and 8th September 2012.
- 3. **Omieno K.K.** 2012. Virtual Reality in Education: Trends and Issues. 13th Strathmore University Annual ICT Conference. ICT and Society: Adaptive Computing and Technologies. 7th and 8th September 2012
- 4. Karume S.M. & Omieno K.K. (2011). The grid as a driving force for e-learning and OERs in Africa. Oral presentations of 3rd ACDE Conference & General Assembly on Bridging the Development Gap in Africa through Open and Distance Learning 12th to 15th July, 2011, Dar es Salaam, Tanzania.
  - http://www.out.ac.tz/acde/index.php?option=com\_content&view=article&id=64&Itemid=81
- Omieno K. K, Karume S.M., & Ogao P.J (2011). Use of intranet grids in higher education institutions to leverage Africa grid connect Initiative.12th STRATHMORE UNIVERSITY ANNUAL ICT CONFERENCE. 2nd and 3rd September 2011.
- 6. **Omieno, K.** & Wanyembi, G. (2010). Managing Knowledge Sharing: Mutual understanding, Strategic alignment and contribution of corporate intranets in Kenyan Public Universities. Conference proceedings of 11th Strathmore University ICT conference, 2010, Kenya
- 7. **Omieno, K.K.** & Wanyembi, G. (2010). A Framework to measure corporate intranets use in institutions of higher learning: Case of Kenyan Public Universities. Conference proceedings of 11th Strathmore University ICT conference, 2010, Kenya
- 8. Wabwoba, F. & **Omieno**, **K**. (2010). The Role of wireless technologies in taking education to rural villages in developing countries. Conference proceedings of 11th Strathmore University ICT conference, Nairobi, Kenya, 3-4 September, 2010, Kenya
- Karume, S. & Omieno, K. (2010). Open knowledge resources and Research: The role of grid computing for knowledge creation and sharing, Proceedings of the 2nd International conference on Internationalization of Higher Education and Research in Africa: Responding to Opportunities and Challenges, Kampala, Uganda. 4th -5th November, 2010. <a href="http://www.anienetwork.org/content/2nd-anie-annual-conference-presentations-kampala-uganda-4-5-november-2010-1">http://www.anienetwork.org/content/2nd-anie-annual-conference-presentations-kampala-uganda-4-5-november-2010-1</a>

#### 9. REVIEWER FOR INTERNATIONAL JOURNALS

Omieno Kelvin is a reviewer with three International Journals:

- International Journal of Computers and Technology http://cirworld.com/index.php/ijct/index
- European Journal of Science and Engineering (EUJSE) http://www.journalsgate.com/journalsgate/index.php?route=product/category&path=92

#### 10. WORKSHOPS/ SEMINARS/ ARTICLES

#### 10.1. WORKSHOP/SEMINARS/ ARTILES

- Published an Advisory Article in Daily Nation on "Transit to Knowledge Economy". Page 18. Friday 31st July 2020
- Organized and Chaired an Online Webinar on Postgraduate Scholarship: Do's and Don'ts when Choosing Postgraduate Study and Thesis Research, Presented on Microsoft Teams, 9th June 2020
- ❖ Delivered Online Public Lecture on: Developing an eLearning Strategy for Kenyan Universities: Drivers and Barriers, Presented to University managers, staff and students from various universities in Kenya Via KENET Web conferencing platform 20th April 2020
- ❖ Facilitator in Workshop on Grant Proposal Writing organized by Directorate of Research and Postgraduate Support, MMUST Feb 20-22nd February 2019, Busia County
- Workshop on DHIS2- Health Information System organized by HealthIT, University of Nairobi and Ministry of Health, Egon Hotel, Thika, 18th -22nd December, 2017
- Workshop on Review of MMUST 2015-2020 University Strategic Plan 10th -11th November 2017, Golf Hotel, Kakamega
- Organized for the 1st School of Computing and Informatics Inaugural Postgraduate Seminar, MMUST SPD 004, 27th-28th April 2017.
- ❖ Workshop on Africa Computer Human Interaction (AfriCHI'2016), University of Nairobi Towers, Nairobi, 21st-25th November, 2016
- Organized for 5th MMUST ICT Post-Graduate Seminar 29th March 2016- SPD 004, Masinde Muliro University of Science and Technology
- ❖ TVET stakeholders' workshop at Bishop Stam, Kakamega for TVET Programmes March 2016
- Workshop on Module Writing by MMUST in Busia Farm view 7th-9th Sept. 2015
- ❖ Workshop training on Grant proposal writing by MMUST in Busia ATC, 1st -5th June 2015
- Workshop on Technical, Vocational, Education and Training in MCU, MMUST, 26th May 2015
- Attended Training workshop on Confidentiality and Security of Information by NSIS, MMUST, 20th- 22nd May 2015
- Organized for an International Women's Day Workshop, for Computing Students by Safaricom, MMUST, 19th March 2015
- Organized for Public Lecture on Internet Critical Resources and Governance: The role of Academia by ICANN, MMUST, 29th January 2015
- Organized for Workshop on Catalyzing employability skills by Microsoft and ACWICT, MMUST, 23rd January 2015

- ❖ Published an Article in MMUST Magazine-"Eye on MMUST" on "ICT Usage for Information Administration in MMUST" October/December 2014 Pp: 19
- Organized for Workshop on Mobile BootCamp for mobile applications development and USSD by iHub, Ushahidi and Africa's talking, MMUST, 14th -15th November, 2014
- Auditors Training Workshop at Bishop Stam on ISO 9001:2008 and QMS Documentation- by Apex Management Systems Consultants 3rd -5th November 2014
- ❖ Participated in 1st ICT seminar on the Theme: Emerging Trends in ICT held at MKU-Kakamega 16th Nov 2013
- Presented in 3RD Departmental Seminar, Computer Science, MMUST. Paper Presented "Which Way to Go: Open Access or Subscriptions Publications?" 27th June 2013
- Organized 2ND Departmental Seminar, Computer Science, MMUST. Paper presented "The Importance of Research: Goals and Implications" 28th March 2013
- Workshop on Module Writing organized by School of Open Learning and Continuing Education (SOLACE), held in Busia-Kenya FarmView Hotel, February 2013. Module developed: DIT 052 Rapid Application Development
- Workshop on the changing face of strategic management: development within a difficult global economy through technology, creativity and innovation for strategy policy implementation, Imperial Hotel Kisumu-Kenya by DALC-MIT, 8th Dec, 2011
- Workshop on HIV and AIDs Integration in University, held at Busia ATC, Kenya from 4th July-6th July, 2012
- 2nd Symposium on Academic Linkages on the theme: Academic linkages: strategies, opportunities, challenges and future. Technical paper presented "Improving Virtual Knowledge Transfer: Strategies and Practice", 3rd December, 2011, Masinde Muliro University of Science & Technology
- ❖ Published an Article in MMUST Newsletter on "New Learning Paradigms: Why choose online Education at MMUST? Volume 1, Issue 12 July-August 2011
- ISO 9001:2008 Training in Quality Management, MMUST, March 8-9, 2011 by KEBS
- ❖ Workshop on Internationalization of higher education, ANIE workshop, Munyonyo-Resort, Kampala, Uganda, November 2- 3, 2010
- ❖ Teal –Research4Life and Prota Training Workshop, Masinde Muliro University, Kenya, May, 6 7, 2010

#### 10.2. SEMINAR TALKS/PRESENTATIONS

- Presentation on "Preparing Quality and Sellable Curriculum Vitae", SCI- 13<sup>th</sup> June 2018, MMUST
- Presentation on "Preparing for Job market, Technologies Required and How to be Marketable in Dynamic Environment", Career Week, SCI- 12<sup>th</sup> -15<sup>th</sup> February 2018, MMUST.

#### 11. HONORS AND AWARDS

- 1. 2020: Certificate of publication with ISJ Theoretical & Applied Science
- 2019: Certificate of Participation in the Training workshop on Disability Mainstreaming held on 15<sup>th</sup> March 2019, KAFUCO
- 3. **2018:** Certificate of Paper presentation in World Conference on Transformative Education (WCTE,2018), 26th-28th July 2018, MMUST
- 2018: Certificate of Organizing World Conference on Transformative Education (WCTE,2018), 26th-28th July 2018, MMUST
- 5. **2018:** Certificate of Paper presentation in the First Pan African International Congress on Knowledge Generation and Dissemination, 18th-22nd June 2018, Kisumu Roya Swiss Hotel
- 2018: Certificate of Organizing in the First Pan African International Congress on Knowledge Generation and Dissemination, 18th-22nd June 2018, Kisumu Roya Swiss Hotel
- 7. **2018:** Certificate of Participation in the First Pan African International Congress on Knowledge Generation and Dissemination, 18th-22nd June 2018, Kisumu Roya Swiss Hotel
- 2018: Certificate of Rapporteur in the First Pan African International Congress on Knowledge Generation and Dissemination, 18th-22nd June 2018, Kisumu Roya Swiss Hotel
- 2018: Certificate of Participation in the mUzima Hackathon Organized by Moi University IBIM and MMUST-SCI, 18th-22nd May 2018, MMUST
- Africa Cyber Security Summit Organized by Ministry of ICT, Kenya and Nasaba 8th-10th KICC, Nairobi.
- 11. 2018: Certificate of participation in the Training on Strategic Leadership and Management of Higher Education Institutions conducted by School of Business and Economics at MMUST, 26th-28th March 2018
- 12. 2017: Certificate of Appreciation by the Deputy Vice Chancellor, Academic and Student Affairs for Excellent organization during 12th MMUST Graduation on 15th December 2017
- 13. 2017: Certificate of Participation as a Team Leader and Module Writer for CSC 109: Computer Applications Module for University Level use
- 14. 2017: Certificate of Participation as a Team Leader and Module Writer for BCS 101: Fundamentals of Computing Module for University Level use
- *15.* **2016:** Certificate on ISO 9001:2008 Continual Improvement Training Course held on 29th-30<sup>th</sup> August 2016, Bishop Stam, Kakamega
- 16. 2016: Certificate of Participation in AfriCHI Workshops, Nairobi, Kenya
- 17. 2015: Certificate of Participation in TVET workshop
- 18. **2015**: Certificate of Publication in Journal International Journal of Advanced Research in Computer and Communication Engineering
- 19. 2015: Certificate of Participation in Module Writing by MMUST
- 20. 2015: Certificate of participation in Deans, Directors, Coordinators and HODs Induction, by MMUST, Kenya
- 21. 2014: Certificate as Internal Quality Assurance Auditor, by KEBS
- 22. 2012: Certificate of participation in publishing article in IOSR Journal of engineering
- 23. 2012: Certificate of participation in International Conf. on Disaster Risk Reduction, MMUST
- 24. 2011: Certificate of participation in 1st Engineering, Science & Technology conf., MMUST.
- 25. 2010: Certificate for completion of TEAL training, MMUST, Kenya
- 26. 2008: Certificate for Completion of Database and Actuate Training, G7 Systems Kenya.
- 27. 2007: Certificate for Industrial Attachment at G7 Systems Kenya.
- 28. **2007**: Certificate of participation: Budalang'i Constituency Education Day: Topic Controlling Aids among Youths in Secondary Schools, Busia, Kenya.
- 29. 2007: Certificate for participation in IEEE exhibition by Centurion Systems, Nairobi, Kenya
- 30. 2007: Award of First runners up in IEEE exhibition done at MMUST, Kenya

#### 12. OTHER PERSONAL ATTRIBUTES

- 1. Team- work and Self-determination
- 2. Experience in the development of web-based database systems
- 3. Willingness to travel both regionally and internationally
- 4. Able to establish and maintain professional contacts with relevant people and organizations.
- 5. Ability to think logically and implement solutions to problems.
- 6. Good communication ability in English, spoken and written.
- 7. Excellent interpersonal communication and good personal organization skills, including skills in mentoring and capacity building.
- 8. Good judgment and willingness to take initiative;
- ability to work under pressure often to meet tight deadlines without compromising the quality of deliverables

#### **REFEREES**

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16-May-21

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