

**CURRICULUM VITAE**

**PROF. GEORGE OTIENO RABURU**

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY  
(JOOUST)**

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS (SIIS)**

Mobile: +254 700 911917;

Email: [graburu@jooust.ac.ke](mailto:graburu@jooust.ac.ke)

+254 733 911 917;

[graburu@gmail.com](mailto:graburu@gmail.com)



## 1. University Education

1998 -Sept 2001: PhD in Management Information Systems, Kennedy-Western University-USA,

1995-1996: MSc in Computer Science, University of Southampton-UK,

1994-1995: Post Graduate Diploma: Computing and Computer Studies University of Essex-UK.

1979-1983: Bachelor of Education (Science): Double Mathematics Option University of Nairobi–Kenya,

## 2. High School Education

1977-1978: A-Level, Kanunga High School, Kiambu-Kenya

1973-1976: O-Level, Nyabondo High School, Kisumu-Kenya

## 3. University Teaching/Administrative Experience

**Sept 2012 to Present: *Jaramogi Oginga Odinga University of Science & Technology–Kenya***

### **Position Held:**

Associate Professor in Computer Forensics and IT Security (April 1 2021 –Present)

Senior Lecturer in Computer Forensics and IT Security (Sept 2012 –March 31<sup>st</sup> 2021)

SIIS Coordinator Postgraduate Studies (Dec. 2015 to April 2017)

SIIS Coordinator Industrial Attachment (Dec. 2015 to April 2017)

Dean, School of Informatics and Innovative Systems (Sept 2013-Nov 2015)

Ag Director: Board of Postgraduate Studies-(Aug 1<sup>st</sup> 2014 to Aug 25<sup>th</sup> 2014)

- (Sept 28<sup>th</sup> 2016 to 12<sup>th</sup> Oct 2016)

**July 2011-Aug 2012: *Great Lakes University of Kisumu-Kenya***

### **Position Held:**

Associate Professor in Software Engineering

Dean, Faculty of Arts and Science

Head of Department of Information Technology

**Sept 2008 to July 2011: *Buraimi University –Oman***

### **Position Held:**

Assistant Professor Software Engineering

Head of Department: Information Technology Dept.

Chairperson-Sub Committee of Quality Assurance



**Sept 2001 – June 2008: *King Fahd University of Petroleum & Minerals –Saudi Arabia.***

**Position Held:**

Senior Lecturer Information Technology (June 2004-June 2008)

Coordinator: E-learning -WEBCT Platform (April 2006 – June 2008)

Lecturer Information Technology (Sept 15<sup>th</sup> 2001- May 2004)

**Jan 1994-Oct 1995: *University of Essex, Colchester-UK***

**Position Held:**

Graduate Assistant in Computer Science.

**June 1989- Oct 1991: *University of Nairobi, Nairobi-Kenya (Kisii College Teaching Centre)***

**Position Held:**

Undergraduate Part time Lecturer in Statistics, Faculty of External Studies.

**Oct 1991- Oct 1993: *University of Nairobi, Nairobi-Kenya***

**Position Held:**

Senior Administrator- Faculty of Education

#### **4. Other Teaching Experiences**

**Sept 1996- June 1997: *Technology College-Saudi Arabia***

**Position Held:**

Head of Department: Computer Science Dept.

Lecturer in Computer Science

**January 1986 – October 1991: *Kisii College, Kenya***

**Position Held:**

Head of Department: Mathematics Dept.

Lecturer in Mathematics.

**January 1983 – January 1986: *Kanunga High School, Kenya***

**Position Held:**

Head of Department: Mathematics Department

Teacher of Mathematics and Further Mathematics.



## 5. Refereed Journal Publications

1. **George Raburu** (2020, September), Application of Technology in Strengthening Collaboration in Research, Teaching and Learning for African Universities in the post COVID-19 Era, *World Journal of Innovative Research* (WJIR), ISSN: 2454-8236, Volume-9, Issue-3, September 2020 Pages 66-68
2. **George Raburu**, Lawrence Dinga (2020, September), Key Issues in Internet Governance, *World Journal of Innovative Research* (WJIR), ISSN: 2454-8236, Volume-9, Issue-3, September 2020 Pages 69-75
3. **George Raburu**, Lawrence Dinga (2020, July), Legal Issues in Computer Forensics and Digital Evidence Admissibility, *International Journal of Computer Science and Mobile Computing* (IJCSMC), ISSN 2320-088X, Vol. 9, Issue. 7, pg.86 – 89
4. Vivian Oloo, **George Raburu**, Michael Oduor Okoya (2020, July), Constraints in Prevention of Cybercrime in Public Cybercafés in Kisumu City, *International Journal of Computer Trends and Technology* (IJCTT) – Volume 68 Issue 7 – July 2020
5. Nicodemus Aketch Ishmael, Dr. Solomon Ogara, **George Raburu** (2020, July), Review of Smart Buildings Based On Adoption of Internet of Things Application Enablement Platform, *World Journal of Innovative Research* (WJIR) ISSN: 2454-8236, Volume-9, Issue-1, Pages 115-132
6. **Raburu George**, Omollo R.O., Okumu Daniel (2018, March), Applying Data Mining Principles in the Extraction of Digital Evidence, *International Journal of Computer Science and Mobile Computing* (IJCSMC). ISSN : 2320-088X, Vol.7, Issue (3), Pg. 101-109
7. Abuonji P, Rodrigues T, **George O. Raburu**, Load Balanced Network: Design, Implementation and Legal Consideration (2018, September), *Society for Science and Education: Transactions on Networks and Communications*, ISSN 2054 7420, Vol. 6 No 5, Pg. 16-29
8. Charles Omoga, **George Raburu**, Samuel Liyala (2018, June), E-Marketing Adoption among Small Businesses in Hospitality Industry in Kenya: The Institution Theory Perspective International, *Journal of Advanced Research in Computer and Communication Engineering* (IJARCCE), ISSN(Online) 2278 – 1021, ISSN(Print) 2319-5940 Volume 7, Issue 6, Pg. 136-143
9. Joshua Agola, **George Raburu**, (2018, May) A dynamic scheduling Optimization Model (DSOM), *International Journal of Research in Engineering and Science*, ISSN(Online) 2320-9364, ISSN(Print) 2320-9356, Volume 6, Issue 4, Pg . 49-60
10. Abuonji P, Rodrigues T, **George O. Raburu**, A Stratified Cyber Security Vigilance Model: *An Augmentation of Risk-Based Information System Security* (2018, September), Society for Science and Education: Transactions on Networks and Communications, ISSN 2054- 7420, Vol. 6 No 5. Pg. 41-58
11. Joshua Agola, **George Raburu**, (2018, May) Analysis of Scheduling Models Applicable in Referral Health Systems, *International Journal of Engineering Research & Science(IJOER)*,ISSN 2395-9364, Volume 4, Issue-5, Pg. 23-29
12. Richard Omollo, **George Raburu**, (2018, April), Suitability of Addition-Composition Fully Homomorphic Encryption Scheme for Securing Data in Cloud Computing, *International Journal of Computer Science and Information Security* (IJCSIS), ISSN 147-5500, Vol. 16, No. 4, Pg. 160-173



13. Charles Omoga, Samuel Liyala, **George Raburu** (2018, April) Small Sized Business and E-Marketing Adoption: Towards a Conceptual Model, *International Journal of Scientific Research Engineering & Technology (IJSRET)*, ISSN 2278 – 0882, Volume 7, Issue 4, Pg. 327-337
14. Omollo R.O., **Raburu G.O**, Omolo-Ongati N, Okelo B.N. (2017, October), Enhancing Data Security in Cloud Computation Using Addition Composition Fully Homomorphic Encryption Scheme, *Journal of Engineering (IOSRJEN)*. ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol.7,Issue (10), Pg. 20-29
15. Charles Ooko Akelloh, **Raburu G.** Liyala Samuel, Lucy Arvin Onditi (2017), Infrastructure: A Barrier to Ecommerce Development and Adoption, *Journal of Engineering and Applications*. ISSN 2224-5782, Vol. 7 No. 9, Pg. 17-27
16. Awuor F., **Raburu G.**, Onditi A., Rambim D.(2016), Building E-Agriculture Framework in Kenya, *Journal of Agricultural Informatics*. (ISSN 2061-862X) Vol. 7, Issue 1, Pg. 79-97
17. Sirma J., **Raburu G.**, Okelo B. (2016, June), Security Breach Incidences of SACCOs with or without Security Policy with Broad Scope: A case Study, *Journal for Computer Science and Engineering (IJRDO)*. Vol. 2, Issue 6, Paper 19, ISSN 2456-1843, Pg. 150-164
18. Felix Obegi, **Raburu George**, Michael Okoya (2016, February), Innovation Factors for Corporate's to consider while implementing Server Virtualization Technology, *ARNP Journal of Systems and Software*, ISSN 2222-9833
19. Felix Obegi, **Raburu George**, Michael Okoya (2016), Implementation of Server Virtualization Technology: The Human Resource Capacity Factors, *Journal of Information and Knowledge Management*, ISSN 2224-5758, Pg. 65-77.
20. Omieno K. K., **Raburu G.**, Raburu P. (2015, December), Performance Based Usability Maturity Assessment Framework for VLS in Universities, *International Journal of Advanced Research in Computer and Communication Engineering* Vol. 4, Issue 12, ISSN 2278-1021, ISSN (Print) 2319 5940, Pg. 6-14
21. Ogada P.O., **Raburu G.**, Liyala S., N.B. Okelo N.B.(2015, June), Usability of Honeypots in Kenet Member Institutions in Western Kenya as Proactive Tools for Monitoring Cyber Related Incidences, *Journal for Computer Science and Engineering(IJRDO)*.Vol. 1 , Issue 6, Paper 10, ISSN 2456-184, Pg. 70-90
22. Ogada P.O., **Raburu G.**, Liyala S., N.B. Okelo N.B.(2015, June), Deployment of Honeypots as Proactive Detection Tools for Monitoring Cyber Related Incidences, *Journal for Computer Science and Engineering(IJRDO)*.Vol. 1 , Issue 6, Paper 9, ISSN 2456-184, Pg. 59-69
23. Musyoka M. N., **Raburu G.**, Yoga C. (2015 June), Assessment of Security Measures in Universities for Enhancement of Integrity of Information Systems in Kisumu and Siaya Counties-Kenya, *Journal for Computer Science and Engineering(IJRDO)*.Vol. 1, Issue 6, Paper 8, ISSN 2456-1843, Pg. 49-58.
24. Sirma J., **Raburu G.**, Okelo B.(2015, March), Relationship between Industry Best Practices and Information Security Breach Incidents SACCOs in Kenya, *Journal for Computer Science and Engineering(IJRDO)*.Vol. 1, Issue 3, Paper 16, ISSN 2456-1843, Pg. 125-136.



25. Sirma J., **Raburu G.**, Okelo B.(2015, March), Information Security Updates and Information Security Breach Incidents of SACCOs in Kenya, *Journal for Computer Science and Engineering(IJRDO)*.Vol. 1, Issue 3, Paper 15, ISSN 2456-1843, Pg. 110-124.
26. Obegi F., **Raburu G.**, Okoya M. O.(2014, October), Organizational Factors Influencing Corporates Implementing Server Virtualization Technology: A survey of Companies Listed on the Nairobi Securities Exchange, Kenya: *Published in JETCIS*, Vol. 5, No.10 ISSN 2079-8407, Pg. 761-771
27. Omieno K., **Raburu G.**(2014, June), Usability Maturity Indicators for Virtual Learning Systems: *Journal of Emerging Trends in Computing and Information Science*, Vol 5, No 5, ISBN 2279-8407, Pg. 377-382
28. Ondulo J., Aduda D., Estambale B, Rabah K., **Raburu G.**, Omolo R.(2014), A review of factors Influencing e-Health Adoption in Kenya, Barriers and facilitators: *IST Africa Conference Proceedings*, ISBN 978-1-905824-43-4, Pg. 1-16
29. Omieno K. K., Oenga L., **Raburu G.** (2013, May), Usability Maturity Model for VLS: Conceptual Framework. *International Journal for Computers and Technology* Vol 5, No 3 ISBN 2277-306, Pg. 317-320

## 6. Book Publications

1. **Raburu G** (2008) 1<sup>st</sup> Ed, *Access Computer Studies*, Jomo Kenyatta Foundation-Kenya.
2. **Raburu, G.** &Kariuki, S.K. (2003) 1<sup>st</sup> Ed., *Revision O level Mathematics*. Kenya Literature Bureau.
3. **Raburu, G.** &Kariuki, S.K. (1992). 2<sup>nd</sup> Ed., *Revision O level Mathematics*. Kenya Literature Bureau-Kenya.
4. **Raburu, G.**, Githua, N., Omollo, B., Kariuki, S. & Wanjala, C. (1990). *Secondary Mathematics Book 4*. Kenya Literature Bureau.
5. **Raburu, G.**, Githua, N., Omollo, B., Kariuki, S.K., &Wanjala, C. (1989). *Secondary Mathematics Book 3*. Kenya Literature Bureau-Kenya.
6. **Raburu, G.**, Githua, N., Omollo, B., Kariuki, S. K., &Wanjala, C. (1988). *Secondary Mathematics Book 2*. Kenya Literature Bureau-Kenya .
7. **Raburu, G.**, Githua, N., Omollo, B., Kariuki, S. K. &Wanjala, C. (1987), *Secondary Mathematics Book 1*, Published by Kenya Literature Bureau-Kenya



## 7. PhD Theses Supervised and Graduated

1. Paul Abuonji (Nov 2019)  
Title of thesis: *A stratified Cyber Security Vigilance Model for Corporate Information Technology Infrastructure.* **PhD in Information Security & Audit**
2. Richard Omolo (Nov 2019)  
Title of Thesis: *Design and Evaluation of Addition-Composition of Fully Homomorphic Encryption Scheme and its Enhancement of Data Security in Cloud Computing.* **PhD in Information Security and Audit**
3. Joshua Agola ( Dec 2018)  
Title of thesis: *Shredding Optimizer for Integrated Patient Referral System-PhD in Information Security & Audit)*
4. Charles Owuor Omoga (Dec 2018)  
Title of thesis: *A Model for Examining Factors Influencing Adoption of Electronic Marketing by Small and Medium Sized Hotels-* **PhD in Business Information Systems**
5. Charles Ooko Akelloh (March 2018).  
Title of thesis: *E-Commerce Adoption Model and Its Application in Publishing Industry-PhD in Business Information Systems.*
6. Kelvin K. Omieno (May 2017)  
Title of thesis: *A Usability Maturity Model for Virtual Learning Systems - PhD in Business Information Systems*
7. Fredrick Awuor (May 2016).  
Title of thesis: *Modelling and Building an E-Agriculture Framework: A Case Study of Kenya - PhD in Business Information Systems*

## 8. Masters Projects Supervised and Graduated

1. Shadrack Owiti (May 2015).  
Title of project: *Development and Implementation of E-leave Management System in Banking Sector -Msc in Information Technology Security & Audit*
2. Charles Oduk (May 2015).  
Title of project: *Effects of Job Information Technology Security Training on Network Security Management - Msc in Information Technology Security & Audit.*
3. Jasper Abong'o (May 2015).  
Title of project: *The Effects Biometrics on Enterprise Security and Information Assurance (JOUST)-MSc in Information Technology Security & Audit*
4. Martin Mutuku Musyoka (May 2015).  
Title of project: *Assessment of the Level of Compliance by the Universities to their ICT Security Policies: A Survey of Kisumu, Siaya Counties- MSc in Information Technology Security & Audit.*
5. Loice Achieng' (May 2015).



Title of project: *Cloud-Based Virtualization as an enabling Technology for the Transformation of Healthcare in Kenya*- **MSc in Information Technology Security & Audit.**

6. Patrick Owuor Kevin (May 2015).  
Title of project: *Microfinance Management Information Systems Integrated with Mobile Money and Unstructured Supplement Data Service (USSD) for Microfinance Services*- **MSc in Information Technology Security & Audit.**
7. Vivian Anyango Aloo (May 2015).  
Title of project: *Analysis of Cybercrime Prevention Measures and Practices in Public Cybercafes in Kisumu City*- **MSc in Information Technology Security & Audit.**
8. Paul Abuonji (May 2014).  
Title of project: *Implementing a Secure and Cost Effective Messaging Solution using enhanced Zimbra Collaboration Suite* - **MSc in Information Technology Security & Audit.**
9. Gonza Omoro (May 2014).  
Title of project: *Web Based Data Collection, Transmission and Reporting Systems* - **MSc in Information Technology Security & Audit.**
10. Satwinder Singh Rupra (May 2014).  
Title of project: *Effective Bandwidth Management in a Campus* - **MSc in Information Technology Security & Audit.**
11. Evans Odhiambo Onyango (May 2014).  
Title of project: *Laptrack Tracking and Recovery Systems* - **MSc in Information Technology Security & Audit**
12. Felystas Abiero Ajwang' (May 2014).  
Title of project: *Building and Deploying Secure Web Bases E-Learning Systems*- **MSc in Information Technology Security & Audit.**
13. Castro Auma Yoga (May 2014).  
Title of project: *Provisioning a Virtualized IT Lab using Open Source Solutions: A Model for Learning and Research Institutions in Kenya* -**MSc in Information Technology Security & Audit.**

## **9. On-Going PhD Supervisions**

1. Kwama Leonard Ogweno-I163/4360/2013  
Title of thesis: *Integration of Mobile Technology Application for Monitoring and Evaluation on Impact of National Health Care*-PhD in Information Security & Audit (**External Examination**)
2. Oroko Dismas Ombuya-I361/4008/2013  
Title of thesis: *A Framework for Implementation of Telemedicine Systems in Developing Countries*- PhD in Business Information Systems (**External Examination**)
3. Nicodemus A. Ismael-I361/4135/2013  
Title of thesis: *Model for Ubiquitous Application Enablement Platform (AEPS) Harnessing Network Convergence Technologies for Smart Cities in Kenya*-PhD in Information Systems (**External Examination**)





## 10. On-Going Master's Supervisions

1. Oguna Onyango Chrispin- I251/4106/2013  
Title of Project: *Social Network Recruitment Technology Adoption Framework in Higher Educational Institutions in Kenya* (**External Examination Stage**)
2. Omolo Noah Okidia-I152/4222/2016  
Title of project: *Inclusive Digital Evidence Admissibility Assessment (IDEAA) Framework –MSc in Information Technology Security & Audit* (**Data Collection Stage**)
3. Onyango Daniel-I152/4262/2016  
Title of thesis: *Enhancing Security against Business Email Compromise -MSc in Information Technology Security & Audit* (**Data Collection Stage**)
4. Ogendi Jacob Odiwuor-I152/4416/2016  
Title of thesis: *Payload Flagging Model for Cloud Performance Enhancement -MSc in Information Technology Security & Audit* (**Proposal Stage**)

## 11. Examination

### University: External Thesis/Project Examiner

- a) December 2017, **Rose Nakhanu Rakhiya, MIT/006/12**, Kibabii University  
Title of Master's Thesis: "*Investigation of Determinants of ICT Electronic Waste Management in Public Universities*"
- b) September 2017, **Ratemo Makiya Cyprian , PhD/IT/013/014**, Kibabii University  
Title of PhD Thesis in Information Technology: "*Modeling the Success of Cross Platform for Mobile Instant Messaging Systems in the University.*"
- c) October 2016, **Tobias Okumu Otibine, MIT/003/12**, Kibabii University  
Title of Master's Thesis: "*Quality Assurance in Software Development*"
- d) June 2016, **Tsinale Loice Harriet-MIT/004/12**, Kibabii University.  
Title of Master's Thesis: "*A framework in Cloud Computing Acceptance in Public Universities in Kenya*"
- e) June 2016, **Tomohiko Suggishita**, Great Lakes University of Kisumu  
Title of PhD Thesis: "*The Modeling Transformative Assistance for Health*"
- f) April 2015, **Careena Otieno Odawa**, Great Lakes University of Kisumu  
Title of PhD Thesis: "*Reliability, Validity and use of Community Based Information Systems for Continuous health Improvement in varied socio-economic contexts in Western Kenya*"

### University: Internal Thesis Examiner



- a) March 2020, **Jeremiah Onyango Owango-I152/4056/2014**, Jaramogi Oginga Odinga University of Science & Technology, Title of Master Thesis: *Information Security Model for the University Networks in Kenya*
- b) January 2018, **Collins Otieno Odoyo I361/4293/2014**, Jaramogi Oginga Odinga University of Science & Technology, Title of PhD Thesis: *“Mobile Phone Users Perception on Mobile Phone Money Utilization”*
- c) December 2017, **Everleen Nekesa Wanyonyi I152/4137/2013**, Jaramogi Oginga Odinga University of Science & Technology, Title of Master Project: *“A Secure Health Records System: A case of Jaramogi Oginga Odinga Teaching and Referral Hospital”*
- d) April 2017, **Miliscent Obara I152/4039/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of the Masters Project: *“Towards Security Information Systems in Public Universities: A case of Kenyan Public Universities-Western Kenya Region”*.
- e) March 2017, **Collins Otieno Odoyo I361/4293/2014**, Jaramogi Oginga Odinga University of Science & Technology, Title of PhD Thesis: *“Perception on Mobile Phone Money Utilization in Homabay Region, Kenya”*
- f) November 2016, **Moses Omwenga Momanyi I151/4364/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of Masters Project: *“Knowledge Management Model: A case Study of Kisii County Schools”*
- g) May 2015, **Apuko Faith Adhiambo I152/4376/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of Masters Project: *“Information Technology Governance and Value Creation in Kenyan Public Sector”*
- h) May 2015, **Nyamwamu Noah Bosibori I151/4017/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of Masters Project: *“Conceptualization of Green IT in Manufacturing Firms in Kenya”*
- i) February 2015, **Peter Migoya Halwenge, I1524289/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of Masters Project: *“Risk Management Strategy for Health Information Systems”*
- j) February 2015, **Wafula Erick Mugoma I152/4433/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of Masters Project: *“Evaluating Business Continuity and Disaster Recovery Planning in IT department in Kenya Higher Education Institutions”*
- k) February 2015, **Protus Muchesia I152/4042/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of Masters Project: *“Providing eLibrary Management Systems”*
- l) February 2015, **Peter Odhiambo Ogada I142/4386/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of Masters Project: *“Deployment of Honey as Proactive Detection Tools for Monitoring related Incident”*
- m) January 2014, **Satwinder Singh I152/4192/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of the Masters Project: *“Effective Bandwidth Management in a campus”*



- n) January 2013, **Kwach Boniface Otieno W151/436/2012**, Jaramogi Oginga Odinga University of Science & Technology, Title of PhD thesis: “*Mathematical Model for Drug Therapy in Patients with Diabetes Mellitus*”

**Other Institutions: External Examiner**

1996-1998: Cambridge University Local Examination Syndicate-A and O-Level (250)

1986 to 1993: The Kenya National Examination Council (KNEC) A-and O-Level (500)

**12. EXAMINATION MODERATION**

**University: Internal Examination Moderator**

- a) February 2018: *Examination for Year 2, Semester 1, 2017/18 Academic year*, School of Informatics and Innovative Systems (SIIS), Jaramogi Oginga Odinga University of Science & Technology
- b) September 2017: *Examination for Year 1, Semester 2, 2016/17 Academic year*, School of Informatics and Innovative Systems (SIIS), Jaramogi Oginga Odinga University of Science & Technology.

**13. Conference/Workshop/Seminar Participation and Presentations**

- 1. Dec 7<sup>th</sup> -10<sup>th</sup> 2020, *Virtual Training In Competency Based Assessment Programme TVET Curriculum Development, Assessment And Certification Council (TVET CDACC )*
- 2. Dec 1<sup>st</sup> -10<sup>th</sup> 2020, *Gobal Action on Cybercrime Extended*, Council of Europe Webinar
- 3. June 16<sup>th</sup> 2020, *Centres of Vocational Excellence: Skills ecosystems for Innovation, regional development and social inclusion –Tknika*, Basque VET Applied Research Centre, Webinar
- 4. Nov 20<sup>th</sup> 2016 to Nov 29<sup>th</sup> 2016 :*Training Workshop for Curriculum Development for Academic Programmes*, Naivasha-Kenya
- 5. May 5<sup>th</sup> 2016: *Kenya Open Data Initiative County Outreach*-Kisumu County, Kisumu-Kenya
- 6. June 26<sup>th</sup>, 2014: *Pedagogy Workshop: The use of Cloud computing in University Teaching*-A paper presented at Jaramogi Oginga University of Science and Technology-Kenya.
- 7. June 24<sup>th</sup> -26<sup>th</sup> 2015, *The first JOOUST International Scientific Conference, Harnessing Science, Technology and Innovation for Sustainable Development and Good Governance*, Main Campus, Bondo - Kenya
- 8. May 27<sup>th</sup>-28<sup>th</sup> 2014: *East African Community Regional Meeting on Preventing and Combating Cybercrime*, Kampala-Uganda (UNESCO)
- 9. Aug 21-24<sup>th</sup> 2013: *Corporate Governance and Risk Management –School of Government*, Nairobi
- 10. 11<sup>th</sup>- 14<sup>th</sup> July 2011: *Should Information Technology be Incorporated into the Pre-School Curriculum?*-A paper presented at the 2011 Early Childhood Studies Conference-Indonesian University of Education-Indonesia



## 14. Projects Participation

### Under Implementation

a) **Project Name:** Enhancing the Resilience and Inclusivity of Rural Livelihoods through Promotion of Sustainable Agricultural Commodity Value Chains in Kenya

**Role:** Principal Investigator

**Funding Agency:** AIRTEA

**Date of Submission:** August 9<sup>th</sup>, 2021.

**Expected Funding Amount:** Euro € 400 000

b) **Project Name:** ACU Early Career Researcher (ECR) Training Grants.

**Role:** Principal Investigator (PI)

**Funding Agency:** Association of Commonwealth Universities

**Date of Submission:** November 23<sup>rd</sup>, 2020

**Funded Amount:** British Sterling Pound 1000

c) **Project Name:** Towards Secure and Inclusive Online Examination System In Response to Covid-19 Pandemic

**Role:** Principal Investigator (PI)

**Funding Agency:** Spencer Foundation

**Date of Submission:** July 1, 2020

**Expected Funding Amount:** USD \$ 50 000

d) **Project Name:** Development of a Mobile Phone Application to Support Ending of Female Genital Mutilation (FGM) in Kenya

**Role:** Lead Consultant (LC)

**Funding Agency:** UNITED NATIONS CHILDREN'S FUND (UNICEF)

**Date of Submission:** 29 June 2020

**Expected Funding Amount:** USD \$ 20 000

e) **Project Name:** Integrating ICTs in Mitigating the Effects of Covid-19 Pandemic on Persons with Disabilities (PWDs) in Rural Kenya

**Role:** Principal Investigator (PI)

**Expected Funding Agency:** Novo Nordisk Foundation

**Date of Submission:** 17 Aug 2020

**Expected Funding Amount:** DKK 1 million



f) **Project Name:** Towards a Secure and Resilient Virtual Platform for Inclusive Community Engagement, Collaborative Research and University Teaching In Response to Covid-19 Pandemic

**Role:** Principal Investigator (PI)

**Expected Funding Agency:** UK Research and Innovation (UKRI)/Newton Fund

**Date of Submission:** July 31<sup>st</sup> 2020

**Expected Funding Amount:** BPS £30,000

g) **Project Name:** JOOUST Cyber Resilience Centre **Year:** 2020

**Role:** Principal Investigator (PI)

**Expected Funding Agency:** Imperial College – London, Royal Academy of Engineering

**Date of Submission:** March 2020

**Expected Funding Amount:** BPS £5.4 m

h) **Project Name:** Applied Human Machine Intelligence in East Africa – HUMAIN

**Role:** Team Leader

**Funding Agency:** Belgium Government

**Date of Submission:** February 3<sup>rd</sup> 2020

i) **Project Name:** East Africa Community (EAC) Higher Education Information Management Systems (HEIMS) **Year:** 2019

**Funding Agency:** Inter-University Council for East Africa (IUCEA)

**Role:** Lead Consultant (LC)

**Location:** Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan

**Expected Award Amount:** USD 200,000

**Date of Submission:** August 16<sup>th</sup> 2019

j) **Project Name:** Using Virtual Environment for Curriculum Sharing and Research Collaboration among Universities in East Africa **Year:** 2019-2021

**Funding Agency:** Spencer Foundation-Small Grants

**Role:** Principal Investigator (PI)

**Location:** Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan

**Expected Award Amount:** USD 50,000

**Date of Submission:** July 2<sup>nd</sup> 2019



**Accomplished:**

k) **Project Name:** Capacity Building for Resilience to Climate change through SDI for uptake with County Government in Lake Victoria region

**Funding Agency:** USAID SERVIR AFRICA SMALL GRANTS TO RCMRD **Year:** 2014 to 2016

**Role:** Researcher in the area of Data Sharing and Spatial Data Infrastructure

**Location:** Siaya and Homa Bay Counties

**Amount Awarded:** USD 30,000

## 15. Curriculum Development

### University Curricula Review-CUE/CHE

January 27<sup>th</sup> 2014 - Evaluation of Curriculum of Master of Science in Applied Information Technology, African Nazarene University (Ref CUE/8/21 Vol. 11/34).

March 13<sup>th</sup> 2013 – Evaluation of Bachelor of Science in Computer Science, Kenya Highlands Evangelical University (Ref CHE/10/6/Vol. 18/12, CHE/8/Vol. 4/105).

March 28<sup>th</sup> 2013- Site Inspection, Bachelor of Science in Computer Science, Kenya Highlands Evangelical University (Ref CHE/8/8 Vol. 5/).

### TVET Curricula

March 2019 To-Date Cyber Security Technology level 6

### Other Curricula-Kenya Institution of Education (KIE)

1986-1993: Secondary Mathematics Curriculum Developer

## 16. University Committee Membership

- a) Elearning (2020-Present)
- b) Curriculum (2019– Present)
- c) Senate-(2013-2015)
- d) Deans –(2013-2015)
- e) Postgraduate-(2015-2017)
- f) Disciplinary-(2013-2015)
- g) Graduation-(2014-2015)
- h) Recruitment-Ad Hoc
- i) Tender Evaluation-Ad Hoc
- j) University Tender Committee-Jan 2018 to To-date
- k) Curriculum Committee Ad Hoc

## 17. Professional Memberships/Associations

1. British Computer Society (BCS), Grade: MBCS, Membership Number: 990049949
2. Institute of Mathematics and its Applications (IMA), Grade: MIMA, Membership Number: 20870



## 18. Community Service and Outreach

1. January 2019 to Date: Developing TVET Curriculum for Diploma and Certificate in Cybersecurity and Forensics in Kenya.
2. May 2016 to Feb 2018: Professional Certificate in Cyber Security Technology and Forensics Training
  - a. **Location:** Nairobi Learning Centre
  - b. **Collaborating Bodies:** JOOUST & Managecom Systems Limited, Nairobi
  - c. **Positions:** Coordinator for the Joint Technical Committee (JTC) Sept 2016-2018 Trainer, Sept 2016 to 2018
3. 2016 September to 2018 : Board of Management, Member: St Hilarius-Nyabondo Mixed Secondary School, Kisumu County-Kenya
4. 2015 to Present: Board of Management, Chair: St Joseph's Boys Boarding Primary School, Kisumu County-Kenya.
5. 2015 to Present: Board of Management, Member: St Georges Special Secondary, Kisumu County-Kenya
6. 2015 September to Present: Board of Management, Member: Nyakach Girls High School, Kisumu County-Kenya
7. April 28<sup>th</sup> 2015 Guest Speaker on "*Course Selection for University Admission*", Wangapala High School-Homabay County, Kenya
8. March 23<sup>rd</sup> –March 27<sup>th</sup> 2015 Training High School Principals on "*Role of ICT on Administration of Secondary Schools in Kenya*", Nakuru-Kenya

## 19. University Taught Courses

Computer Forensics I and II, Cybercrime Investigation, Criminalistics Forensic Science Lab, Advances in Cybercrime Investigations and Digital Forensics, Object Oriented Programming(Java and C++) and Software Engineering, Information Security Audit and Control, Human Computer Interface (HCI), Ethical Hacking and Penetration Testing, Research Methodology.  
Design Science Research in Information Systems, Information Technology Research and Practice.

## 20. Areas of Research Interest

- Cybercrime and Prevention techniques.
- Application of Artificial Intelligence and Machine Learning to Teaching and Research
- Internet of Things and Analysis of Computer Forensic Evidence
- Cloud Computing and E-learning
- E-waste
- E-agriculture.

