# CURRICULUM VITAE

# DR. COLLINS OTIENO ODOYO

School of Computing and Informatics

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Nationality: Kenyan

Date of Birth: 04th July, 1985

# **EDUCATION**

2006–2010: Moi University, Eldoret; Kenya.

Undergraduate studies: B. Education (Technology Education); Second Class Honors

upper Division

2011–2012: Maseno University, Kisumu; Kenya.

Postgraduate studies: MBA. (Management Information Systems)

2014–2018: Jaramogi Oginga Odinga University of Science and Technology, Bondo; Kenya

Postgraduate studies: Ph.D. Business Information Systems

Title of study: Determinants of Mobile Phone Users' intention to use Mobile Phone

Money Services.

# PROFESSIONAL EXPERIENCE

### November, 2018 – to date

Lecturer: School of Computing and Informatics, Masinde Muliro University of Science and Technology. As a lecturer, I offer courses in Information Systems and Information Technology, Data Analysis, Research methodology and Experimental design, Operations Research, Cloud Computing, Electronic Commerce & Management and Innovation to both undergraduate and post graduate students. In addition to teaching I am involved in student mentorship and supervision of their respective research projects. Currently, I am supervising three PhD and six MSc students in diverse information technology fields.

### Chairperson, Departmental Postgraduate Committee:

As a lecturer in the department of Information Technology, I was appointed to Chair departmental Postgraduate Committee. Department of Information Technology postgraduate department include both Masters and Doctorate programs. In this capacity I

oversee postgraduate students' mentorship and supervision, coordinate the teaching of course work units. The mandate also include tracking students' progress ensuring that they accomplish their studies within the timelines.

# October, 2015 - March, 2017

Planning Monitoring Evaluation and Learning Officer: At Undugu Society of Kenya I was responsible for Planning project activities especial during project proposal development for fundraising, Monitoring, Evaluation and Learning activities. This mandate covered Planning, Monitoring, Evaluation and learning activities at the organization, in consultation with the various program managers and program officers at national level and was paying close attention to Gwassi project which was the biggest project for the organization at the time. I lead the process of data collection analysis and giving program and projects directions from the lessons learnt from the data interpretation. I also supported the field teams in implementing the various projects which included Sexual Reproductive Health Rights (SRHR) advocacy for the adolescents, Youth empowerment through Technical/Agricultural, Vocational Education and Training, Community empowerment through formation and strengthening of Self Help Groups (SHGs). I also acted in the capacity of Program Manager in the absence of the manager for the Gwassi Integrated Community Empowerment Project (GICEP).

# June, 2012 – September, 2015

Learning and Research Officer at Digital Opportunity Trust (DOT Kenya). I was managing the national learning activities within DOT Kenya in consultation with the Kenyan Learning manager and the Global learning team. I also coordinated and oversaw interns' capacity building activities, intern training and support as the interns facilitated the ReachUp! and StartUp! Curriculums, which were the main programs of the organization. I further participated in development and reviewing of Digital Opportunity Trust (DOT) curriculum from time to time for effective realization of the objectives of the organization. I also conducted needs assessment on the regions where DOT Kenya programs were needed most. Further, I supported Monitoring and Evaluation, with qualitative and quantitative approaches to research analysis and report writing, as well as development of the required tools for project monitoring and evaluation.

### June, 2011 – May, 2012

Monitoring and Evaluation Officer at Maisha Development Trust, Homabay, Kenya. As the Monitoring and Evaluation officer, I supported the organization to develop their Monitoring and evaluation Systems. I was also able to support the organization in conducting Baseline survey in 2011-2012 in the informal settlements of Homa Bay on Tenancy agreements between Landlords and Tenants in a project funded by Comic Relief.

# ADMINISTRATIVE RESPONSIBILITIES

#### **SCHOOL LEVEL:**

- 1. Chairperson, Postgraduate departmental committee (December, 2018 To Current)
- 2. Acting Chair of Department, Computer Science (August, 2019 September, 2019)
- 3. Exams coordinator, computer science department (December, 2018 September, 2019)
- 4. Convener of the School of Computing and Informatics PhD in IT curriculum review committee (May, 2019 March, 2021)

#### COLLEGE LEVEL:

- 1. Project Assistant Lead (PAL), HealthIT project partnership (October, **2019** March, 2021).
- 2. Session chairperson, Masinde Muliro University of Science and Technology, 13th Multi-Disciplinary International Conference, June, 2019

### **ACHIEVEMENTS**

- 1. Organized a successful Webinar for School of Computing and Informatics on 9<sup>th</sup> June, 2020, that attracted participants from more than six (6) universities, both staff and students.
- 2. Developed curriculum for Diploma in Business Information Technology, MMUST
- 3. Organized eight (8) successful School of Computing and Informatics postgraduate seminars, MMUST

### STUDENT SUPERVISION

### ON-GOING THESIS RESEARCH/PROJECTS MSc

- 1. **Lusweti Samuel Wafula (**SIT/G/15/15). An Enhanced Bio-inspired ACO Model for Fault Tolerant Networks. MMUST.
- 2. **Ogai Victor Andale** (SIT/G/013/2015). Optimized Energy Efficient Model for Computing Devices to Reduce on Electrical Energy Consumption in Institutions of Higher Learning. MMUST.
- 3. **Sarah Kemunto Mogaka** (SIT/G/10/09). A Usability Evaluation Model for Mobile Learning Information Systems. MMUST.
- 4. **Rawlings Mulongo Khamati** (SIT/G/09/2015). Evaluation of Cyber Attacks Preparedness among Kenyan Universities. MMUST.
- 5. **Kenneth K. Songol** (SIT/G/14-57886/2017). A Prognosis of Prostate Cancer among Patient Using Deep Learning Algorithm.

- 6. **Wangila Emily Nasimiyu** (SIT/G/14-57470-2016). Affective Computing for Effective Learning. MMUST.
- 7. **Geofrey Ouma** (SIT/G/09/10). Implementation of Electronic Waste Management Guidelines for Public Universities in Kenya. MMUST.

### PhD

- 1. **Mogaka Ogamba Stanley:** Sustainable Deployment Process Model for Mobile Technology Mediated Learning in Kenyan Universities.
- 2. **Samuel Khayo Shitote** (SIT/H/01-53301/2018). An Internet of Things (IoT) Model for Mitigating Cannibalism in Catfish: A case of African Catfish (Clarias Garipinus) Fingerlings.

# **PUBLICATIONS**

- 1. S. Munialo, & **Odoyo, C. O. (2020).** Impacts of Electronic Wastes on Environment and Human Health. INTERNATIONAL JOURNAL OF SCIENTIFIC & ENGINEERING RESEARCH. Volume 11, Issue 5, May-2020. <a href="http://www.ijser.org">http://www.ijser.org</a>. ISSN 2229-5518.
- 2. M. W, Mwadulo, & **Odoyo, C. O.** (2020). Phenomenology Approach Applicability in Information Systems and Technology Field. COMPUTER SCIENCE AND INFORMATION TECHNOLOGY 8(2): 37-42, 2020. <a href="http://www.hrpub.org">http://www.hrpub.org</a> DOI: 10.13189/cs it.2020.080201
- 3. Kirongo A. C. & **Odoyo, C. O.** (2020). Research Philosophy Design and Methodologies: A Systematic Review of Research Paradigms in Information Technology. GLOBAL SCIENTIFIC JOURNALS: Volume 8, Issue 5, May 2020, Online: ISSN 2320-9186.
- 4. Ojera, P., & **Odoyo, C.** (2020). Current State of Sustainability Reporting: A Case of Public Universities in Western Kenya. EUROPEAN JOURNAL OF BUSINESS AND MANAGEMENT RESEARCH, 5(2). <a href="https://doi.org/10.24018/ejbmr.2020.5.2.295">https://doi.org/10.24018/ejbmr.2020.5.2.295</a>
- M. W, Mwadulo, & Odoyo, C. O. (2020). ICT Adoption in the Educational Management of Primary Schools in Kenya. UNIVERSAL JOURNAL OF COMMUNICATIONS AND NETWORK: Volume 8, Issue 1: 1-5, 2020: DOI: 10.13189/ujcn.2020.080101
- 6. **Odoyo, C. O**, & Ojera, P. B (2020). Impact of Top Management Support on Accounting Information System: A Case of Enterprise Resource Planning (ERP) System. UNIVERSAL JOURNAL OF MANAGEMENT: Volume 8, Issue 1: 12-19, 2020. DOI: 10.13189/ujm.2020.080102
- 7. Ndeda, L. A, & **Odoyo, C. O** (2019). Cyber Threats and Cyber Security in the Kenyan Business Context. GLOBAL SCIENTIFIC JOURNALS: Volume 7, Issue 9, September 2019, Online: ISSN 2320-9186
- 8. **Odoyo, C. O**, Liyala, S, Odongo, B. C., Abeka, S, & Ogara, S. (2018). Validation of Extended Theory of Reasoned Action to Predict Mobile Phone Money Usage, WORLD JOURNAL OF COMPUTER APPLICATION AND TECHNOLOGY 6(1): 1-13

- 9. **Odoyo, C. O**, Liyala, S. (2018). Mobile Money Users' Functionings and Freedoms: Amartya Sen's Capability Approach, WORLD JOURNAL OF COMPUTER APPLICATION AND TECHNOLOGY 6(1): 14-22
- Odoyo, C. O, Liyala, S, Odongo, B. C, & Abeka, S. (2016). Elements Enhancing the Use of Mobile Phone Money Services: A Case of Homa Bay Region, Kenya. WORLD JOURNAL OF COMPUTER APPLICATION AND TECHNOLOGY 4(4): 39-45
- 11. **Odoyo, C. O**, Liyala, S, Odongo, B. C, & Abeka, S. (2016). Theory of Reasoned Action as an Underpinning to Technological Innovation Adoption Studies, WORLD JOURNAL OF COMPUTER APPLICATION AND TECHNOLOGY 4(1): 1-7
- 12. **Odoyo, C. O**, Liyala, S, Odongo, B. C, & Abeka, S. (2016). Challenges Facing the Use and Adoption of Mobile Phone Money Services, WORLD JOURNAL OF COMPUTER APPLICATION AND TECHNOLOGY 4(1): 8-14
- 13. **Odoyo, C. O**, Liyala, S, & Odongo, B. C. (2015). Theoretical and Practical Implications of Applying Theory of Reasoned Action in an Information Systems Study, OPEN ACCESS LIBRARY JOURNAL.
- 14. Gulali, I. D, Odoyo, C. O, Obura, J. M, Abong'o, B, & Ondoro, C. (2015). Effect of Implementing Quality Management System on the Performance of Public Universities in Kenya: A Case of Maseno University, Kenya, JOURNAL OF BUSINESS, ECONOMICS AND MANAGEMENT. Vol. 3, No. 3, pp. 145-151.
- 15. Oliech, I. A, **Odoyo, C. O**, & Iteyo, C. (2015). Women Participation in Elective Leadership Positions in Homa Bay Town and Rangwe Constituencies of Homa Bay County, Kenya, AMERICAN JOURNAL OF SOCIAL SCIENCES. Vol. 3, No. 2, pp. 23-32.
- 16. Ondore, J. O, **Odoyo, C. O**, Obura, J. M, Kobiero, J. O, Odondo, O, & Okello, S. (2015). Effect of Different Strategies on Procurement Efficiency in Public Secondary Schools: A Survey of Public Secondary Schools in Ndhiwa District, Kenya, AMERICAN JOURNAL OF BUSINESS, ECONOMICS AND MANAGEMENT. Vol. 3, No. 2, pp. 104-112.
- 17. Odidi, S. B, **Odoyo, C. O,** Ochola, C. O, & Onkware, K. (2014). Socio Economic Inequalities and Malaria Morbidity Experiences among Different Classes of Residents of Kisumu City, Kenya. AMERICAN JOURNAL OF SOCIAL SCIENCES. Vol. 2, No. 5, pp. 107-114.
- 18. Muchilwa, D. M, **Odoyo, C. O**, Oginda, M, & Oima, D. (2014). The Impact of Public Relations Principles in the Strategic Management of the Police Force in Kenya, UNIVERSAL JOURNAL OF MANAGEMENT 2(3): 116-126.
- 19. **Odoyo, C. O,** Oginda, M, Obura, J. M, Aila, F. O, Ojera, P. B, & Siringi, E. M. (2013). Effect of Information Systems on Revenue Collection by Local Authorities in Homa Bay County, Kenya, UNIVERSAL JOURNAL OF ACCOUNTING AND FINANCE 1(1): 29-33.
- 20. **Odoyo, C. O**. (2013). Factors Affecting Implementation of Community Projects: Case of Kimira Oluch Smallholder Farm Improvement Project in Homa Bay County, Kenya, UNIVERSAL JOURNAL OF MANAGEMENT 1(2): 111-118.

### CONFERENCE PROCEEDINGS

- 1. Odoyo C. O. (2020) Moderator, at AHERI 2020 Virtual Conference title "Innovations in Higher Education"
- 2. Ojera P. B. & **Odoyo C. O.** (2019), Current State Of Sustainability Reporting: A Case Of Public Universities In Western Kenya. Masinde Muliro University of Science and Technology 13<sup>th</sup> Multi-Disciplinary International Conference, 2019.
- 3. **Odoyo C. O.** & Ojera P. B. (2019), Impact Of Top Management Support On Accounting Information System: A Case Of Enterprise Resource Planning (ERP) System. Masinde Muliro University of Science and Technology 13th Multi-Disciplinary International Conference, 2019.
- 4. **Odoyo C. O.** (2019), Use of ICT in Enhancing Sustainable Food Security Communication and Coordination (Poster Presenter: Food Security in Africa Category). Regional Young Scientists' Conference 2019 and Science Diplomacy Training Workshop, by TWAS-SAREP in Collaboration with Kenya National Academy of Science.
- Odoyo, C. O., Maina, J., Kimeli, V., Awuor, F. & Rambim, D. (2019) A Qualitative Approach to Understanding the Determinants of Mobile Phone Users' Intention to Use Mobile Payment Services. IST-Africa 2019 Conference Proceedings: IIMC International Information Management Corporation, 2019, ISBN: 978-1-905824-62-5
- 6. **Odoyo, C. O.** (2014). Expected Role of Information Systems on County Revenue Collection by Homa Bay County Government, Kenya. Maseno University Journal. *Proceedings of the Multidisciplinary Conference Held at Maseno University on 30 June-1 July 2014*. Vol. 1: 158-166.

### **BOOKS AND BOOK CHAPTERS**

- 1. **Odoyo, C. O** (2015). Introduction to Business Research Methods. <u>LAP Lambert Academic Publishing</u>: Online: ISBN10 3659794848, ISBN13 9783659794841
- Odoyo, C. O, Tambo A. W. O & J. M, Obura (2015). Effect of Outsourcing on Organizational Performance. <u>LAP Lambert Academic Publishing</u>: Online: ISBN10 3659792713, ISBN13 978-3659792717

### **EXAMINED THESIS**

#### PHD THESIS

- 1. Amuomo Nixon Ochieng (SIT/H/01-52823/2018). An Integrated Framework for eHealth Impact Evaluation at Public Health Facilities: A Kenya Case, From Masinde Muliro University of Science and Technology, December, 2021.
- 2. Gilbert Gilibrays Ocen (SIT/H/03/14). A Multi-platform Digital Forensic Evidence Extraction Process Model and Metrics for Mobile Devices, From Masinde Muliro University of Science and Technology, December, 2019.

3. Samson Wanjala Munialo (SIT/LH/003/2015). A Size Metric-Based Effort Estimation Method for Service-Oriented Architecture Systems. From Masinde Muliro University of Science and Technology, October, 2019.

#### MSC. THESIS

- 1. Leonard Mukhebi Muganda (SIT/G/05/11). Decentralized Blockchain-Based Model for Livestock Data Management in Kenya, From Masinde Muliro University of Science and Technology, October, 2021.
- 2. Osore Dickson Waliaro (SIT/G/14-58185/2016). Functional Sustainability for Enterprise Resource Planning System in Kenyan Universities. From Masinde Muliro University of Science and Technology, November, 2019.
- 3. Njoroge Patrick Macharia (MIN12/20642/15). A Framework for Effective Information Security Risk Management in Kenyan Public Universities. From Kisii University, October, 2019.
- 4. Ben Mariga Bogonko (MINI11/20473/15). The user involvement in the implementation of the enterprise resource planning in public universities: A case of Kisii University. From Kisii University, March, 2019

# REVIEWER (JOURNALS)

- 1. Scholars Journal of Economics, Business and Management Associate Editor
- 2. Saudi Journal of Business and Management Studies Associate Editor
- 3. Moi University Students' Organization (MUSO) Editorial Board Member, 2009/2010

# WORKSHOPS AND TRAININGS

- 1. Research Management Workshop, organized by UK Research and Innovation, Global Challenges Research Fund and SARIMA, from 15<sup>th</sup> June, 2020 to 13<sup>th</sup> July, 2020.
- 2. The Book Publishing Process: An Elsevier Author Workshop, organized by Researcher Academy On Campus (ELSEVIER), online on Wednesday 03 June, 2020.
- 3. The Article Publishing Process: An Elsevier Author Workshop, organized by Researcher Academy On Campus (ELSEVIER), online on Monday 01 June, 2020.
- 4. Science Diplomacy Training Workshop, organized by TWAS-SAREP in collaboration with Kenya National Academy of Sciences (KNAS) at Nairobi Safari Club, Nairobi Kenya from 23rd to 25th October 2019.
- 5. Stewardship Training, organized by Enlightened Christian Gathering Church (ECG) at Kisumu in the Month of September and October, 2019.
- 6. Grant Proposal Writing Workshop, organized by Masinde Muliro University of Science and Technology on 28th February, 2019.

- 7. Blood Donor Sensitization Workshop, organized by Bloodlink Foundation in collaboration with National Blood Transfusion Services (NBTS) at Eldoret Wagon Hotel on 20<sup>th</sup> March, 2010.
- 8. Peer Counseling and Training, organized by Dean of Students office, Moi University, Eldoret, ended March, 2009.
- 9. Blood Donor Sensitization Workshop, organized by Bloodlink Foundation in collaboration with National Blood Transfusion Services (NBTS) at Eldoret Wagon Hotel on 27<sup>th</sup> September, 2008.
- 10. Disaster Management Training, organized by Kenya Red Cross Society at Moi University, Chepkoilel Campus from 22<sup>nd</sup> to 25<sup>th</sup> September, 2007.
- 11. Community Based First Aid, organized by Kenya Red Cross Society at Moi University, Chepkoilel Campus on 21<sup>st</sup> May, 2007.

### CONSULTANCIES

- 1. **January, 2020 to Current:** Consultant at, **SCALABLE SYSTEMS LIMITED**.
- 2. **November, 2020:** Qualitative Data Analysis, by **LIRESS CONSULTING LIMITED**, P.O Box 14231 00400, Shankardass House I 3rd Floor I Moi Avenue, Nairobi
- 3. October, 2019 March, 2021: Project Assistant Lead (PAL), HealthIT. Providing support as well as capacity building to health practitioners in Kakamega County on DHIS and Kenya EMR.
- 4. **January, 2017 December, 2017:** Research consultant for Sexual and Reproductive Health and Rights Alliance (SRHR Alliance) mainly of Operation Research, data collection, monitoring and evaluation to their 17 alliance partners.

### PROFESSIONAL MEMBERSHIP

1. Teachers Service Commission TSC No: 561433/Y

# **COMMUNITY SERVICE**

- 1. Life Member Kenya Red Cross Society, Homabay county branch (2005 To date)
- 2. Chairman, Homabay County Young Professionals Forum (2011 2017)
- 3. Secretary Homabay County Young Contractors Association (2012 2014)

# REFEREES

1. Ms. Dorothy A. **RAMBIM**, Chairperson of Department, Department of Computer Science, School of Computing and Informatics, Masinde Muliro University of Science and

Technology, P.O. Box 190 – 50100, Kakamega, Kenya. Mobile. +254-722471419; Email: <a href="mailto:drambim@mmust.ac.ke">drambim@mmust.ac.ke</a>

- 2. Dr. Jasper **ONDULO**, Examinations Cordinator, School of Computing and Informatics, Masinde Muliro University of Science and Technology, P. O. Box 190 50100, Kakamega, Kenya. Mobile: +254-727716382; Email: <a href="mailto:jondulo@mmust.ac.ke">jondulo@mmust.ac.ke</a>
- 3. Prof. Solomon **OGARA**, Dean, School of Informatics and Innovative Systems, Jaramogi Oginga Odinga University of Science and Technology, P. O. Box 210, Bondo. Mobile+254-710581009; Email: <a href="mailto:solomon.ogara@gmail.com">solomon.ogara@gmail.com</a> or <a href="mailto:solomon.ogara@gmail.com">sogara@jooust.ac.ke</a>
- 4. Dr. Kelvin **OMIENO**, Dean, School of Computing and Information Technology, Kaimosi Friends University College. Mobile +254-726849197; E-mail: <a href="mailto:komieno@kafuco.ac.ke">komieno@kafuco.ac.ke</a>