

Name: Humphrey Juma Kilwake



Job Title and Responsibilities

I am a Senior Lecturer in the Department of Computer Science at Masinde Muliro University of Science Technology where I teach both graduate and undergraduate programs, and supervise graduate students. I am also the chairman of the Departmental Graduate Studies Committee.

About Me

I have been doing research and teaching at university level for over ten years. Some of the courses I have taught include Object Oriented programming, Design and Analysis of Algorithms, Data Structures, Object oriented Analysis and Design, Models of Software Systems, Service Oriented Architecture and Enterprise Application Development and Architecture among others. I have supervised to completion several Master of Science students in addition to another 5 that I am currently supervising and have examined over 15 Master of Science in Information Technology theses. I have published 7 papers in refereed journals, conference proceedings and 1 book chapter. Prior to my entry into academia, I worked for over 6 years as an Engineer and liaison officer at the Italian Space Agency telemetry station, San Marco in Malindi, Kenya.

Qualifications

I have a Doctor in Computer Engineering degree obtained from the University of Rome, *La Sapienza* (1998-2003). My thesis research was in the field of Computer Networks and specifically on the application of web technologies for distant adoption. My undergraduate degree is in Electrical Engineering from the University of Nairobi (1986).

Professional Memberships and Activities

I am a professional member of the Association of Computing Machinery, ACM since 2008 with membership No.8915645. I am also a member of IEEE and my membership No.91277539

Expertise

I have taught various courses including Object Oriented programming, Design and Analysis of Algorithms, Data Structures, Data Communications, Mobile Applications Programming, Computer Networks, Object oriented Analysis and Design, Models of Software Systems, Service Oriented Architecture and Enterprise Application Development and Architecture among others. I have supervised to completion several Master of Science students in addition to those I am currently supervising and have examined several Master of Science in Information Technology theses. I have published papers in refereed journals and conference proceedings and written 1 book chapter. I have developed a special interest in teaching programming courses in general but specifically object oriented programming in addition to Data Structures and Design and Analysis of Algorithms. I have taught these courses at various universities in Kenya.

Research Interests

My research interests include Object Oriented Technology, Algorithms, Logic in Computer Science, and Health Information Technologies.

Selected Publications

1. Owoche Patrick Oduor, Wanyembi Gregory, **Kilwake** Humphrey Juma (2015) Evaluating Total Cost of Ownership for University Enterprise Resource Planning: Case of Maseno University. *IOSR Journal of Computer Engineering (IOSR-JCE) e-ISSN: 2278-0661, p-ISSN: 2278-8727, Volume 17, Issue 2, Ver. V (Mar – Apr. 2015), PP 79-87*
2. **Kilwake** Juma, Matoke Nahason, Waliaro Apollo, Wanyembi Gregory, Ogao Patrick (2012) Current Status of E-Health in Kenya and Emerging Global Research Trends. *International Journal of Information and Communication Technology Research. Vol. 2 No. 1 (Jan. 2012). ISSN 2223-4985*
3. Omieno, K., **Kilwake J.**, 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*
4. Mutua S., Wabwoba F., Abenga E., **Kilwake J.**, Ogao P. (2011) Teaching Computer Programming in the 21st Century. *International Journal of Science and Technology, Vol. 1 No. 6 (Dec. 2011). ISSN 2224-3577*
5. Mutua S., Wabwoba F., Ogao P., Abenga E., **Kilwake J.** (2011) Using Program Visualization to Improve ICT skills towards achieving Vision 2030. *International Journal of Information and Communication Technology Research, Vol. 1 No. 8 (Dec. 2011). ISSN 2223-4985*
6. Wabwoba F., **Kilwake J.**, Anselmo I., Abila J. The contest of Information Technology and Computer Science in an ICT driven economy: Are they the same? *East African journal of Engineering, Science and Technology. Vol. 1 ISSN 2219-8598*

7. (ACM / IEEE Proceedings) Mayeku B., Kilwake J., Bertarelli (2010). F Use of low cost wireless communication technology for education in rural Kenya. *Proceedings of the 4th ACM Workshop on Networked Systems for Developing Regions*, Article No. 13. ACM digital library - <http://dl.acm.org/citation.cfm?id=1836014>

8. (Book Chapter - Springer) Bertarelli F., Padoa S., Guaraldi G., Genovese E., Corradini M., Mayeku B., Kilwake J. (2011) Low Cost Wireless Technology and Digital Board for Education in Rural Kenya. *e-Technologies and Networks for Development. Communications in Computer and Information Science, Volume 171, Springer, pp 52-60*

Current Teaching

I am currently teaching the following courses: Models of Software Systems, Database Systems and Information Modeling, Object Oriented Analysis and Design, and Enterprise Application Development and Architectures at graduate level and Data Structures, Design and Analysis of Algorithms and Object Oriented Programming at undergraduate level

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