


CURRICULUM VITAE

	<p>Name: Dr. David Gitonga Mwathi</p> <p>Address : P.O. Box 109-Chuka [60400] Cell: 0722395597 email:mwathis@yahoo.com,dgmwathi@chuka.ac.ke</p> <p>Date of birth:17th August 1978</p> <p>Religion: Christian</p> <p>Sex:Male</p> <p>Languages Spoken:English,Kiswahili</p> <p>Marital Status: Married</p>
---	---

CAREER INTERESTS

To work in a dynamic and challenging environment that provides opportunities to fully exploit my potential and further my career, while being productive to the organization.

KEY STRENGTHS

- A highly intrinsically motivated individual with determination to learn and to succeed
- Good communication and interpersonal skills
- Team player
- Self-driven
- Pro-active,energetic and results oriented
- Excellent Computer skills
- Believes and practices high standards of integrity
- Adaptable to new environments
- Creative and innovative
- Confident
- Conversant with the relevant legislations/laws that relate to ICT.

BASIC EDUCATION BACKGROUND

1994 – 1996 : Kanyakine Boys’ High School
Qualification : K.C.S.E Grade: B+

1993 – 1994 : St. Cyprian Boys’ Sec. School
(Form 1 & 2)

1991 – 1992 : Kamatungu Boarding Primary School

Qualification : K.C.P.E
1985 – 1990 : Nkondi Primary School
(Class 1 – 6)

PROFESSIONAL QUALIFICATION

Sept 2012 – Sept 2018 : University of Nairobi
Qualification : Ph.D. (Computer Science)
Thesis Title : **A Model based approach for implementing authentication and access control in public WLANs.**

Sept 2007-July 2009 : Strathmore University
Qualification : Msc (IT)-Systems Security and Audit option.

1998-2003 : Maseno University
Qualification : Bsc. (Computer Science and Engineering)

WORKING EXPERIENCE

October 2003-April 2007 *Regiotech Computer labs-Computer for schools project*

Responsibilities

: Regiotech labs co-ordinator
: Teaching computer studies
: Consultant on matters ICT.

July 2009-2012 : **Assistant Lecturer, Computer Science, Chuka University**

2012 – June 2021 : **Lecturer, Computer science, Chuka University**

June 2021-Currently : **Senior Lecturer, Computer Science , Chuka University**

Key Responsibilities

- Teaching and examining units offered by Computer Science and ICT department e.g databases systems, data mining, computer networks and data communications, cryptography and cyber security, human computer interface and many others at both undergraduate and postgraduate levels.
- Doing research in the areas of Computer Science such as database and data mining, computer networks and distributed systems, network and cyber security etc.

- Supervising Postgraduate Students in Computer Science and other related areas.

ADMINISTRATIVE DUTIES

July 2009-2012

:Co-ordinator Computer Science and ICT section

2012 -2020

: Chairman/Head of department (Computer Science and ICT)

Responsibilities

- Co-ordinating teaching, learning, examination, research and extension processes in the department
- The lead Senior Officer responsible for ICT strategy and delivery to support transformation and innovation in Chuka University.
- Planning and co-ordinating implementation of all ICT related projects in the university.
- Development and implementation of University ICT strategic policies, ICT strategy, standards, operational plans & budgets.
- Responsible for Formulation, implementation, monitoring and coordination of ICT policies.
- Leading and coordinating the preparation and implementation of ICT strategy, specifically the ICT infrastructure and corporate ICT programme portfolio
- Reporting to senior management on ICT issues and risks.
- Making contribution to the development and the delivery of the University's vision and agenda for transformation through ICT
- Leading in inspiring creativity and flexibility in the management and application of ICT services at Chuka University
- Responsible for establishing strong working relationships with ICT service providers, working jointly to improve University internet connectivity, cost-effectiveness and ensuring that the University realizes value for money

- Leading in the negotiations with ICT service providers on behalf of the University to ensure providers meet staff and students ICT needs.
- Ensuring timely implementation and effective maintenance of ICT systems.
 - Preparation of ICT status reports and ensuring professional standards are observed.
 - Keeping abreast with emerging ICT issues
 - Guiding and developing staff working in the department
 - Ensuring timely implementation of ICT standards in line with the needs of the organization.
- Responsible for development of procurement plan and budget for the Department

2020-Currently

: Chairman, Department of Computer Science

Key Responsibilities

- Co-ordinating teaching, learning ,examination, research and extension processes in the department
- Mentoring students and young academic staff members on matters related to academic progression

KEY ACHIEVEMENTS IN THE UNIVERSITY

- i. Leading the University to **71.6 %** level of automation as per ICT authority assessment in 2017.
- ii. Initiating and implementing more than 20 service delivery innovations to improve service delivery to students, staff and other stakeholders.
- iii. Development of various academic programmes: certificate in computer science, Diploma in computer science, Bsc (Computer science), Bsc (Applied computer science) and Msc(Computer science) of Chuka University
- iv. Development and review of the ICT policy and strategy for Chuka University.
- v. Design of and Implementation of the University core L.A.N and W.A.N back bone
- vi. Procurement of nearly 700 computers including critical servers for Chuka University
- vii. Development and operationalisation of the website for Chuka University

- viii. Implementation of elearning management systems,webconferencing and e-mailing systems for Chuka University.
- ix. Implementation of the core University management information system (ERP) that integrates all the university functions: finance, procurement, library, accommodation, catering, student application, student admission, student registration, timetabling and examinations, hospital, human resource, student and staff web portal.
- x. Implementation of CCTV system ,staff and student biometric system for the University
- xi. Leading the University towards certification on information security management system (ISMS) based on ISO 27001:2013 standard.
- xii. Attracting research/development grants for the University.

RECENT SELECTED PUBLICATIONS

1	Mwathi, D. , Okelo-Odongo., W. and Opiyo., E. (2017).Vulnerability Analysis of 802.11 Authentication and Encryption protocols: CVSS Based Approach. In: <i>International Research Journal of Computer Science</i> . [Online] Vol. 4(6),pp16-23. Available at: http://www.irjcs.com/ .
2	Mwathi, D. , Okelo-Odongo., W. and Opiyo. E. (2016). Selection of EAP Authentication Method for use in a Public WLAN: Implementation Environment Based Approach. In: <i>International Research Journal of Computer Science</i> . [Online] Vol. 3(5), pp.47-52. Available at: http://www.irjcs.com/ .
3	Mwathi, D. , Okelo-Odongo., W. and Opiyo., E. (2016). Algorithm for Selection of EAP Authentication Method for Use In A Public WLAN. In: <i>Journal of Emerging Trends in Computing and Information Sciences</i> . [Online] Vol 7(6), pp.311-316. Available at: http://www.cisjournal.org/ .
4	Benard, O., David, G.M. (2014). Implementing Security on virtualized network storage environment. <i>International Journal of Education and Research</i> .2(4)1-10 Online www.ijern.com
5	Nathan, M., David ,G. (2013).School ICT Policy, a Factor Influencing Implementation of Computer Studies Curriculum in Secondary Schools. <i>Journal of Education and Practice</i> .4(28)197-202 Online www.iiste.org
6	Mwathi (2019). A MODEL BASED APPROACH FOR IMPLEMENTING WLAN SECURITY . <i>IJIRIS::International Journal of Innovative Research in Information Security</i> , Volume VI, 20-28. doi://10.26562/IJIRIS.2019.JAIS10082
7	Mwathi (2019). WLAN SECURITY: A TRUSTED COMPUTING BASE APPROACH. <i>IRJCS:: International Research Journal of Computer Science</i> , Volume VI, 15-20. doi://10.26562/IRJCS.2019.JACS10084

CONFERENCE PROCEEDINGS

1	Mwathi, D. , Okelo-Odongo., W. and Opiyo., E. (2014).). Dangerous wireless local area network (WLAN) risks students & university employees need to know about. In: W.Okelo-Odongo, E. Opiyo, and E.Ayienga (Eds), <i>Trends in distributed computing applications: Real life ongoing research work</i> , pp. 76-84, University of Nairobi: School of computing and informatics. ISBN 978-9966-074-13-3.
2	Mwathi, D. , Okelo-Odongo., W. and Opiyo., E. (2014). Wireless LAN (WLAN) hacking tools in developing countries. In: W.Okelo-Odongo, E. Opiyo, and E.Ayienga (Eds), <i>Trends in distributed computing applications: Real life ongoing research work</i> ,pp 125-136.University of Nairobi: School of computing and informatics. ISBN 978-9966-074-13-3.
3	Mwathi, D., Okelo-Odongo, W. and Opiyo, E. (2015). Attack Susceptibility of Known Attacks on IEEE 802.11 Public WLAN. <i>Proceedings of Chuka University 2nd International Research Conference</i> .
4	Oscar,K.,Mwathi,D.(2020).Secure Cloud Based Tool for Mobile Devices User Data. <i>Proceedings of Tharaka University College 2nd International Research Conference</i> .

POSTGRADUATE SUPERVISION

	Name	Level	Status
1.	Oscar Karuga	Msc(Computer Science)	Graduated
2.	Geoffrey Akoko	Msc(HM)	Graduated
3.	Peter Muthuuri	Msc(Computer Science)	Graduated
4.	Ann Nthiga	Msc(Nursing)	Graduated
5.	Joseph Kithinji	Ph.D Computer Science	Awaiting graduation later in the year.

POSTGRADUATE EXAMINATION: Internally examined several Post Graduate students

RESEARCH INTERESTS

1	Computer Networks Security
2	Networks and Distributed Computing
3	Database Systems and Data Mining technologies
4	Human Computer interfaces Design and evaluation
5	Technology adoption

RESEARCH /DEVELOPMENT GRANTS

- i. Member of a team that developed a national research fund (NRF) infrastructure proposal that eventually won a research grant of about **Kes 67 Million** for GC-ICP-MS/MS equipment.

- ii. Attracted direct engineering support (DES) from **KENET** worth Kes **525,680** which helped in building ICT human capacity and optimization of our ICT network which improved access to internet and other network services offered to our students and staff.

APPOINTMENT IN UNIVERSITY COMMITTEES

- i. Participated as a committee member in development and reviewing of Chuka University strategic plan.
- ii. Information Security Management System(ISMS)Lead:-Chuka University ISO 27001:2013
- iii. Member of University performance contract negotiation and implementation committee
- iv. Member and/or chair of over twenty tender evaluation committees
- v. Participated in several adhoc interview panels for recruiting university employees
- vi. Undergone several internal and external trainings on management, professional and pedagogy.

EXTERNAL APPOINTMENTS AND EXAMINATION

JAN 2021 TO DATE: ADJUNCT ACADEMIC STAFF-EMBU UNIVERSITY

RESPONSIBILITIES

- Guiding the Department and the School on curriculum implementation, evaluation and assessment of curriculum
- Assisting the Department and School on matters related to review of the curriculum in line with current trends in the market and feedback from various stakeholders that include students, employers and other curriculum experts.
- Advising the Department and the School on curriculum matters from time to time
- Examining Post graduate Students
- Mentoring students and young academic staff members on matters related to academic progression

PROFESSIONAL BODIES

- i. Member of ICT professionals in public sector forum
- ii. Member of KENET ICT faculty task work group

COMMUNITY SERVICE

- i. **Member of B.O.G** –Mitunguu Technical training institute, Gatunga Boys Secondary school and Nkondi Girls Secondary school
- ii. **Patron:**Chuka University Technoscience Club and Chuka University Ajira digital club

LINKAGES/COLLABORATIONS/CONSULTANCY

Member of Health-IT Project (Technical co-ordinator/project activity lead) currently on active **MOU** with Chuka University-University of Nairobi, Chuka University- Tharaka-Nithi,Meru County and Embu County departments of health.

CAREER DEVELOPMENT/SPECIALIZATION

Undergone various career development trainings notably: ISMS auditor and implementer, IT governance standards, Cyber Security training, pedagogy, ODEL, fundable research proposal writing, QMS auditor/implementer.

HOBBIES

Community Service

REFEREES

1. Prof. Erastus Nyaga Njoka,
Vice-Chancellor, Chuka University
P.O. Box 109 -60400- Chuka
Cell: 0721672506
2. Prof. Peter K. Muriungi,
Principal Tharaka University College
P.O. Box 193 -60215-Marimanti
Cell: 0728229548
3. Prof. Elisha Opiyo
School of Computing and Informatics,
University of Nairobi
Cell: 0722601224