CURRICULUM VITAE

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Google Scholar Profile Page URL: https://scholar.google.com/citations?user=_XLQ7mgAAAAJ&hl=en&oi=ao

PERSONAL DATA

Name	Peter Nimbe
Place and Date of Birth	Accra, Ghana I 16th June 1986
Address	University of Energy and Natural Resources
	P. O. Box 214, Sunyani, B/A
Phone	+233200502289, +233553435175
Email	peter.nimbe@uenr.edu.gh

EDUCATION

2017-2022	PhD, Computer Science I University of Energy and Natural Resources
2012-2014 Technology	MPhil, Computer Science I Kwame Nkrumah Univ. of Science &
2005-2009	BSc, Computer Science I Catholic University College of Ghana
2001-2004	WASSCE, Science I St. Peter's Secondary School
1992-2001	BECE I St. Peter's Mission School

EXPERIENCE

Feb. 2020-Current — Lecturer I University of Energy and Natural Resources

Teaching courses like Information Security, Information Theory and Applications, Parallel and Distributed Databases, PC Hardware and Maintenance, Network Security and Cryptography, Applied Speech Technology, Principles of Programming, Computer Application Packages, Computer Literacy etc.

Teaching in the top-up programme: Network Security and Cryptography, Information Theory and Applications, Information Security, etc.

Apr. 2015-Current — Cryptographer I Self-Employed

Developing classical and quantum cryptographic algorithms and protocols

Feb. 2018-Jan. 2020	**Assistant Lecturer** I University of Energy and Natural Resources
	Teaching courses like Information Security, Information Theory and Applications, Distributed Systems, PC Hardware and Maintenance, Cryptography and Network Security, Data Structures and Algorithm, Visual Basic.Net, Applied Speech Technology, Principles of Programming, Computer Literacy, Computer Organization and Architecture, C++ Programming etc.
	Teaching in the top-up programme: Operating System and Mobile Computing
Sep. 2017-Dec. 2017	**Part-Time Lecturer** I University of Energy and Natural Resources
	Teaching courses like Cryptography and Network Security, Speech Technology and Web Page Design
Sep. 2016-Jan. 2018	**Assistant Lecturer** I Catholic University College of Ghana
	Teaching courses likes Data Mining, Algorithm and Data Structures, Introduction to Compilers, Computer Graphics, C++ Programming, Visual Basic.Net, C# Programming, Java etc. for both regular and weekend school
Sep. 2010-Aug. 2016	**Senior Research Assistant** I Catholic University College of Ghana
	Teaching courses likes C++ Programming, Databases, Artificial Intelligence Visual Basic.Net, Distributed Systems, Data Structures and Algorithm, Computer Organization and Architecture, Computer Fundamentals and Internet, Information Technology etc.
Jan. 2011-Aug. 2014 Sunyani	**Software Developer and IT Instructor** I MAPRI-TECH Limited,
	Training students in Microsoft Office Applications, Programming and Software Development etc.
Oct. 2013-Nov. 2013	**IT Facilitator** I RLG Communication, Sunyani
	Training students in Microsoft Office Applications and Information Technology
Dec. 2012	**IT Administrator** I Kofi Annan Peace Keeping Center
	In Collaboration with UNDP, WANEP and CUCG For Joint Party Election Results Monitoring (J-PERM) Project for Ghana's Election 2012
	Setting up a LAN to run a system developed for monitoring Ghana's Elections
Aug. 2009-Aug. 2010	**Teaching Assistant (NSS)** I Catholic University College of Ghana
	Assisting lecturers and organizing tutorials
Jun. 2009 Netherlands	**Member of Research Mission** I Radboud Univ., Nijmegen, The
	Research Mission and Exchange Program at iCIS (Institute for Computing and Information Sciences), Faculty of Science.

2004 - 2005	Teaching Staff Member I Royal Pentecostal Academy, Accra
	Teaching subjects like Mathematics, Agricultural Science and General Science

COMMITTEES & POSITIONS HELD

Aug. 1, 2023 – current	Departmental Postgraduate Coordinator I UENR
Aug. 23 – Aug. 24, 2023	Judge – STHISD International Conference 2023 I UENR
	Morning Session – Aug. 23: Big Data Analytics, Machine Learning, Internet-of-Things, Cybersecurity and Digital Forensic
	Moderator: Prof. Kofi Bobi Barimah
	Afternoon Session – Aug. 24: Big Data Analytics, Machine Learning, Internet-of-Things, Cybersecurity and Digital Forensic
	Moderator: Prof. Nana Sarfo Agyeman Derkyi
Jun. 23 – Aug. 25, 2023	Coordinator for Internal Mobilization of All Schools – STHISD Conference 2023 I UENR
Sep. 19 – Sep. 27, 2022	Chief Invigilator in the Second Semester Examinations 2021/2022 Academic Year I UENR
Aug. 22, 2022 – July, 2023	Chairman for School E-learning Committee I UENR
Aug. 22, 2022 – July, 2023	School Distance Education Committee Member I UENR
Aug. 01, 2022 – July 2023	Chairman for Departmental Distance Education/Weekend and E-learning I UENR
Aug. 01, 2022 – current	Departmental Undergraduate Projects Committee Member - Computer Science Programme I UENR
Aug. 01, 2022 – July, 2022	Departmental Quality Assurance and Curriculum Development Committee Member I UENR
Jan. 17 – Mar. 07, 2022	Quantum Computing Lecture Series Coordinator I UENR
Oct. 2021- July, 2022	School Quality Assurance Committee (Rep. Computer Sci. & Informatics) I UENR
Aug. 2021-July 2022	Departmental Quality Assurance Member I UENR
Aug. 2021-Sep. 2022	Departmental Examinations Officer I UENR
May. 2021-Current	Departmental App Challenge Member & Chairman I UENR
Jul. 2020-Sep. 2021	School E-Learning Committee Member I UENR
Nov. 2020-2021	Research & Seminar I UENR
Sep. 2018-2020	Computer Lab Coordinator I UENR
May. 2018- Jul. 2022	Academic Counsellor I UENR
Sep. 2018-2020	Diploma Computer Science Committee I UENR
Mar. 2018-2020	Departmental Audit Committee I UENR

Mar. 2018-2020 UENR	Proposal Development Committee (Comp. Sci. & Inform. Dept.) I
Sep. 2016-Jan. 2018	Website Management Committee I CUCG
Sep. 2016-Jan. 2018	Examination Malpractice Committee I CUCG

ORGANIZATIONS

Dec. 2022- Current	Association for Computing Machinery (ACM) - Professional Member
July. 2022- Current	OneQuantum - Community Member
Jun. 2022- Current	Oxford Quantum Information Society - Member
Jan. 2022- Current	Quantum Ghana (QGhana) – Board Member
Mar. 2022- Current	Institute for Engineering Research and Publication
Aug. 2021- Current	Institute of ICT Professionals Ghana (IIPGH)
Jul. 2021- Current	Stanford Quantum Computing Association - Member
Feb. 2021- Current	Python Ghana
Feb. 2021- Current	European Alliance for Innovation (EAI)
Dec. 2020- Current	International Computer Science and Engineering Society (ICSES)
Apr. 2020- Current	Institute of Research Engineers and Doctors (IRED) – Associate Member
2018-Current	Ghana Science Association (GSA)
Feb. 2018-Current	University Teachers Association of Ghana (UTAG)
Sep. 2014-Current	International Association of Engineers (IAENG)
May 2015-Current	International Association of Computer Science and I.T (IACSIT)
Jun. 2015- Jun. 2018	Institute of Research Engineers and Doctors (IRED) – Student Member

IEEE TECHNICAL COMMITTEES, COUNCILS, COMMUNITIES

Sep. 2021- Current	IEEE Nanotechnology Council
Sep. 2021- Current	IEEE Sensors Council
Jul. 2021- Current	Intelligent Informatics, IEEE Computer Society Technical Committee
Jul. 2021- Current	Data Engineering, IEEE Computer Society Technical Committee
Jul. 2021- Current	Cloud Computing, IEEE Computer Society Technical Committee
Jul 2021- Current	Software Engineering, IEEE Computer Society Technical Council

Jul. 2021- Current Committee	Security and Privacy, IEEE Computer Society Technical
May. 2021- Current	IEEE Collabratec
May 2021- Current	IEEE Quantum Technical Community

LICENSES & CERTIFICATIONS

Sep 2023	IBM Quantum Challenges: Quantum Explorers - Captain Badge | IBM
Sep 24 2023	QNickel Diploma in Quantum Computing & Programming – Qnickel7-358 | Womanium
Sep 20 2023	Certificate of Appreciation: Mentor - QIntern 2023-122 | QWorld
Sep 18 2023	QNickel Diploma in Quantum Computing & Programming - QNickel5-13 | QWorld
Sep 13 2023	Quantum Computing for Natural Sciences (with IBM Quantum) | OpenHPI - Hasso Plattner Institute, Potsdam
Sep 11 2023	Analyzing the Impact of Quantum Computing on Future Wireless Networks | IEEE
Aug 22 2023	LFQ102: Quantum Computing Essentials For Senior Leaders | The Linux Foundation
Aug 13 2023	QMercury Diploma in Quantum Key Distribution | Womanium
Jun 06 2023	Quantum Optimization (with IBM Quantum) | OpenHPI - Hasso Plattner Institute, Potsdam
May 31 2023	**IBM Quantum Challenge: Spring 2023 Achievement** | IBM
May 28 2023	Dummies guide to Practical Quantum Computing with IBM Qiskit | Udemy
Apr., 24 2023	Qubit x Qubit's Introduction to Quantum Computing Course, provided | IBM Quantum & The Coding School
Jan., 18 2023	Quantum Machine Learning (with IBM Quantum Research) | OpenHPI - Hasso Plattner Institute, Potsdam
Jan., 17 2023	Introduction to Quantum Computing (QC0101EN, provided by IBM) | IBM Skills Network
Oct., 10 2022	Introduction to Quantum Computing with Qiskit (with IBM Quantum Research Zurich) | OpenHPI - Hasso Plattner Institute, Potsdam
Sep., 08 2022	Python 101 for Data Science (PY0101EN), Certificate and Badge | Issued By IBM
Aug., 29 2022	Fundamentals of Quantum Computing (LFQ101), Certificate and Badge| Issued By The Linux Foundation
July, 2022	QSilver Diploma Certificate | QLibya
July, 2022	QBronze Diploma Certificate | Womanium Global Quantum Computing & Entrepreneurship Program

Jun, 2022	QBronze Diploma Certificate | QGhana Entangling Workshop
Feb. 22, 2022	IEEE Quantum Internet Summit
Feb. 2, 2022	IEEE Quantum Computing Healthcare Summit
Jan. 10, 2022	IEEE Quantum Computing Innovation Summit
Jan. 2022	IEEE Quantum Executive Series
Dec. 27, 2021	IEEE Quantum Engineering Bootcamp: Module 2 - Integrating Your Findings - Best Practices and Pitfalls for Setting Up a Quantum HW Test Program
Dec. 27, 2021	IEEE Overview of Quantum Machine Learning Algorithms
Dec. 27, 2021	IEEE Spin Qubit System Integration with Advanced Semiconductor Manufacturing
Dec. 27, 2021	IEEE Implications of Quantum Technologies for Cybersecurity
Dec. 27, 2021	IEEE Bringing a Quantum Computer to Life with RF Pulses: Fundamental Aspects of Pulse Level Control
Dec. 27, 2021	IEEE Fundamental Concepts in Quantum Error Correction
Dec. 27, 2021	IEEE Quantum Systems Engineering for Scientists
Dec. 27, 2021	IEEE Systems Engineering Approaches and Challenges in Quantum Computing
Dec. 26, 2021	IEEE CEO Summit on Quantum Computing
Dec. 26, 2021	IEEE Quantum AI Sustainability Symposium
Dec. 26, 2021	IEEE Quantum: Quantum Engineering: Photonics in Quantum Computing and Quantum Networking
May. 12, 2021	IEEE Quantum: Automation and Synthesis of Quantum Circuits
May. 05, 2021	IEEE Quantum: A Hands-On Approach to Quantum Computing Learning – Comics and Coding
Apr. 28, 2021	IEEE Quantum Workforce Development: A New Approach to Quantum Machine Learning
Apr. 20, 2021	IEEE Quantum: Bootcamp - Module 1: Test and Evaluation for Quantum Devices

CONFERENCES, SEMINARS, WEBINARS AND WORKSHOPS

Oct 05, 2023	All IBM Qiskit Machine Learning Tutorials Seminar. Hosted by: Kevin Kawchak, Founder CEO of Medical Quantum Machine Learning Software
Feb 23, 2023	Quantum Programming for Neuroradiology/Medical Imaging. Healthcare and Quantum Computing Discussion Group Hosted by: CEO Kevin Kawchak
Apr 26, 2022	International Conference on Communication, Computing and Industrial Engineering (ICCCIE-2022) I IIMT College of Engineering, Greater Noida, India Presented Papers on the topic:

- Pharmacy Information Systems: a systematic review
- Innovative Approaches to Classical and Quantum Reflected Binary Code Generation using Pascal Triangle, Reversible N-Input C-Gate and Reversible N-Input Q-Gate

Mar 02, 2022	Quantum Webinar I IEEE

Topic: IEEE Quantum Computing Climate Change Summit

Keynote Speakers: **John Levy,** CEO, SEEQC, **Steve Brierley**, CEO, Riverlane, **Masayoshi Terabe**, Head of Quantum Transformation (QX), Sumitomo Corporation, **Paul Lipman**, President Quantum Platforms, ColdQuanta, **Richard Murray**, CEO, ORCA Quantum Computing

Roundtable Discussion

Moderator: **Raghunath Koduvayur**, Head of Marketing and Communications, IQM Quantum Computers

Panelists: **Rima Kasia Oueid**, Commercialization Executive at United States Department of Energy, **Daniel Franke**, Principal at M Ventures, **Dr. Mansour Taghavi Azar Sharabiani**, Lecturer, Imperial College London

Feb 02, 2022	Quantum Webinar I IEEE

Topic: IEEE Quantum Computing Healthcare Summit

Keynote Speakers: **Mark Nicholas Jones**, CEO, Molecular Quantum Solutions, **Hans Melo**, Ph.D., CEO, Menten AI, Inc., **Joseph Emerson**, Ph.D., Head of Quantum Strategy, Keysight Technologies, **Julian van Velzen**, CTIO and Head of Capgemini Quantum Lab

Invited Experts: **Dr. Frederik Flother,** IBM Quantum Life Sciences & Healthcare Industry, Consultant, IBM Academy of Technology Member & Master Inventor, Quantum Computing & AI, **Dr. Elica Kyoseva**, Quantum Computing Scientist, Boehringer-Ingelheim

Jan. 18- Feb 08, 2022	Webinar I Charles Sturt University

Topic: Certified Information Systems Security Professional (CISSP) (Updated) Short Course

Jan. 10, 2022	Quantum Webinar I IEEE

Topic: IEEE Quantum Computing Innovation Summit

Keynote Speakers: **Matt Johnson**, CEO at QC Ware, **Oscar Diez**, Head of Quantum Computing at the European Commission, **Jan Goetz**, CEO at IQM, **Michael Marthaler**, CEO at HQS Quantum Simulations, **Emmanuel Viale**, Managing Director at Accenture Technology Innovation

Invited Experts: **Peter Clark**, Head of Computational Science & Engineering, Johnson & Johnson, Janssen Therapeutics Discovery, **Erik Huestis**, Partner, Foley Hoag, **Heather West**, Senior Research Analyst, IDC

Dec. 27, 2021	Quantum Webinar I IEEE

Topic: IEEE Quantum Engineering Bootcamp: Module 2 - Integrating Your Findings - Best Practices and Pitfalls for Setting Up a Quantum HW Test Program

Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program

Instructor: **Will Madsen**, Quantum Systems Engineering and Architecture Manager, Rigetti Computing

Dec. 27, 2021   Quantum Webinar I IEEE

Topic: Overview of Quantum Machine Learning Algorithms

Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program

Instructor: Dr. Troels Steenstrup Jensen, Head of KPMG Global Quantum and Head of Machine Learning at KPMG Denmark, Marco Ugo Gambetta, NewTech Consultant at KPMG Denmark

Dec. 27, 2021   Quantum Webinar I IEEE

Topic: Spin Qubit System Integration with Advanced Semiconductor Manufacturing

Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program

Instructor: Dr. Lester Lampert, Quantum Computing Engineer at Intel Corporation

Dec. 27, 2021   Quantum Webinar I IEEE

Topic: Implications of Quantum Technologies for Cybersecurity

Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program

Instructor: Dr. Troels Steenstrup Jensen, Head of KPMG Global Quantum and Head of Machine Learning at KPMG Denmark, Marco Ugo Gambetta, NewTech Consultant at KPMG Denmark

Dec. 27, 2021   Quantum Webinar I IEEE

Topic: Bringing a Quantum Computer to Life with RF Pulses: Fundamental Aspects of Pulse Level Control

Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program

Instructor: Dr. Lior Ella, Research and Product Team Leader, Quantum Machines

Dec. 27, 2021   Quantum Webinar I IEEE

Topic: Fundamental Concepts in Quantum Error Correction

Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program

Instructor: Dr. Julian Kelly, Research Scientist, Google AI Quantum

Dec. 27, 2021   Quantum Webinar I IEEE

Topic: Quantum Systems Engineering for Scientists

Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program

Instructor: Dr. John Martinis, Physics Professor, UCSB

Dec. 27, 2021	Quantum Webinar I IEEE
	Topic: Systems Engineering Approaches and Challenges in Quantum Computing
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Instructor: Will Madsen, Quantum Systems Engineering and Architecture Manager, Rigetti Computing
Dec. 26, 2021	Quantum Webinar I IEEE
	Topic: Quantum Engineering: Photonics in Quantum Computing and Quantum Networking
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Instructor: **Dr. Peter McMahon**, Assistant Professor, Cornell University School of Applied and Engineering Physics (AEP)
Dec. 26, 2021	Quantum Webinar I IEEE
	Topic: Quantum CEO Summit on Quantum Computing
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Keynote Speakers: **Rob Hays**, CEO & President, Atom Computing & **Dr. John Martinis**, CEO, Quantala & **Dr. Vikram Sharma**, CEO, QuintessenceLab & **Dr. Michele Mosca**, CEO, evolution
Dec. 26, 2021	Quantum Webinar I IEEE
	Topic: Quantum AI Sustainability Symposium
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Keynote Speakers: **Dr. Lucas Joppa,** Chief Environmental Officer, Microsoft & **Ms. Jenny Bofinger-Schuster**, Senior Vice President for Sustainability & Operational Excellence, Siemens
Oct. 6, 2021	Dell Technologies Emerging Africa Forum I Dell Technologies
	Topic: General Session - The Data Driven Future is Now
	Speakers: **Habib Mahakian, Michael Dell, Mohammed Amin, Dawn Jones, Vanice Hayes, Jason Sandery, Aongus Hegarty, Daniel Keyworth, Haile Gebrselassie**, etc.
	Topic: Create New Value by Innovating with Data
	Speaker: **Faiz Parkar**, Messaging Director, Data Innovation, Dell Technologies
	Topic: Developing a Collaborative, Agile Workspace with Dell Technologies
	Speaker: **Jason Goh**, Director, Industrial Design Engineering, Dell Technologies
May. 12, 2021	Quantum Webinar I IEEE Topic: Automation and Synthesis of Quantum Circuits
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education

	for Workforce Development Program
	Instructors: **Amir Naveh**, Co-Founder and Head of Algorithms, Classiq Technologies
May. 05, 2021	Quantum Webinar I IEEE Topic: A Hands-On Approach to Quantum Computing Learning – Comics and Coding with Q#
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Instructors: **Dr. Kitty Y. M. Yeung**, Microsoft Quantum, Sr. Program Manager
May. 05, 2021	Quantum Webinar I IEEE Topic: A Hands-On Approach to Quantum Computing Learning – Comics and Coding with Q#
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Instructors: **Dr. Kitty Y. M. Yeung**, Microsoft Quantum, Sr. Program Manager
April. 28, 2021	Quantum Webinar I IEEE Topic: Interesting Kernel-Based Quantum Machine Learning Approach
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Instructors: **Dr. Jae-Eun Park**, Program Director for IBM Quantum GBS QCOC
April. 23, 2021	Quantum Web Seminar I WebEx Topic: Quantum Talks
	Instructors: **Carl Williams, Erik DeBenedictis, Chris Franzino, Anne Nielsen**
April. 20, 2021	Quantum Webinar I IEEE Topic: Test and Evaluation for Quantum Devices
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Instructors: **Will Madsen,** Quantum Systems Engineering and Architecture Manager Rigetti Computing
April. 14, 2021	Quantum Webinar I IEEE Topic: Overview of Quantum Machine Learning Algorithms
	Host: Maëva Ghonda, IEEE Chair, Quantum Computing Education for Workforce Development Program
	Instructors: **Dr. Troels Steenstrup Jensen**, Head of KPMG Global Quantum and Head of Machine Learning at KPMG Denmark, and **Marco Ugo Gambetta**, NewTech Consultant at KPMG Denmark
Nov. 29, 2019	Graduate Research Workshop I TYCO CITY HOTEL Theme: Science and Society: Conducting Research in the Sciences and Engineering
	Moderator: Dr. Mary Antwi I UENR Chairperson: Prof. Harrison K. Dapaah I UENR

Speaker: Prof. Robert Kingsford-Adaboh I UG, Legon

| Oct. 28-Oct 29, 2019 | Workshop on Accelerated Computing by Nvidia Deep Learning Institute I UENR |

By: Dr. Mark Amo-Boateng, NVIDIA ambassador and DLI Certified Master Instructor, Lecturer, UENR

Jan. 27, 2018 — Post Graduate Research and Data Analysis Seminar I UENR

Courses: R Programming Software, SPSS, General Outlook, of Post Graduate Research

Authorized By: Prof. Emmanuel Opuni-Frimpong, Pro-VC/Dean, School of Graduate Studies

Jan. 19, 2018 — Symposium on Smart Evolution, Digitized Ghana I UENR

Sessions: Smart City, Smart Forest and Smart Energy

Chairman: Prof. Harrison Kwame Dapaah, Vice Chancellor, UENR

Jan. 25, 2017 — Humboldt Fellowship and Award Opportunities I CUCG

By: Prof. Daniel Obeng-Ofori (Vice Chancellor, CUCG and Humboldt Ambassador Scientist for Ghana)

Mar. 22, 2017 — Do leaders' characteristics and regime transitions in Africa matter for citizens' health status? I CUCG

By: Dr. Frank Gyimah Sackey, Lecturer, CUCG

Feb. 8, 2017 — Tracking our electrical electronic waste footprint I CUCG

By: Dr. Vincent Kyere, Lecturer, CUCG

QUANTUM COMPUTING POSITIONS

May 19 – August 20, 2023 Mentor I QIntern2023 | Quantum Project Internship Program of the QWorld Association

Hosted by: QResearch Department

Coordinators: Aritra Sarkar, Oskar Słowik, Adam Glos

QIntern Team: Yasir Ölmez, Nouhaila Innan, Shantanu Misra

Project: qi23_07: Transparency, security, and immutability of the electoral process in Ghana using classical and quantum blockchain technology

Jun 24 – Jun 29, 2022 Mentor I QGhana Entangling Event - QBronze89 | Quantum Computing and Programming Workshop

Course: Quantum Computing and Programming

Organizers: Lorraine Tsitsi Majiri, Zeki Can Seskir

Workshop Lead: Utku Birkan

Mentors: Comfort Mintah, Peter Nimbe, Jennifer Ahiable, Dorcas Attuabea Addo, and Crownie Eme

May 16 – July 15, 2022	Teaching Assistant I QKrishi and Indian Institute of Science Education & Research (IISER), Tirupati. India

Course: Quantum Computing: Introduction to Algorithms and Implementation using Qiskit

Description: Online Hands-on Course for Students and Professionals with Equal Measure of Theory and Programming Labs Taught by Top Experts from Academia and Industry

Task: Help in setting assignments and arranging course modules

TRAINING

Jul. 28, 2021	Scopus Training for UENR. Elsevier
	By: Daneshree Moodley, Customer Consultant, Elsevier
Mar. 3 – Mar. 4, 2021	Scopus Training. Elsevier By: Daneshree Moodley, Customer Consultant, Elsevier

CONTRIBUTIONS

Sep 19. 2022 - Jun 06. 2023	Norwegian University of Science and Technology (NTNU)

Doctoral Thesis Title: The Impact of Stress on Healthcare Staff's Cybersecurity Practices

Name of Phd Candidate: Muhammad Ali Fauzi

Contribution: Conceptualization, Data Collection, Analysis, Writing, Editing and Visualization

REVIEWER

Jun. 5 – Jun 26. 2023	Quantum Machine Intelligence, Springer
	Paper: A Quantum "Black Box" for Entropy Calculation
Jun. 4 – Jun 18. 2023	International Journal of Security and Privacy in Pervasive Computing (IJSPPC), IGI Global
	Paper: Privacy and Data Protection in ChatGPT and Other AI Chatbots - Strategies for Securing User Information
May 26 – Jun 16. 2023	Journal of King Saud University – Computer and Information Sciences, Elsevier
	Paper: Lightweight white-box encryption communication system for drones
Jan. 26 – Feb. 20 2023	EPJ Quantum Technology, Springer
	Paper: Quantum algorithm for classical multidimensional scaling
Jan. 21– Feb. 18 2023	The Journal of Supercomputing, Springer
	Paper: Quantum Fourier transform based binary arithmetic operations in quantum computing

Apr. 24 – Dec. 2022	International Journal of Security and Privacy in Pervasive Computing (IJSPPC), IGI Global

Paper: Individual Processing of Phishing Emails, Towards a Phishing Detection Framework

Paper: Impact of Cryptographic key on Scalable Computing

Paper: A study on Metaverse awareness, cyber risks, and steps for increased adoption

Mar. 29 – Mar. 31, 2021	Indian Journal of Science & Technology

Paper: Policy Compliance Standard for Underground Fiber Cable Deployment and Post-Deployment Protection - Manuscript IJST-2021-518
Published: July 2021. Indian Journal of Science and Technology 14(25):2088-2094
DOI: 10.17485/IJST/v14i25.518

May 9 – May 12, 2020	Journal of Computer Science. Science Publications

Paper: Adopting Intelligent Modelling in Underground Optical Network Fault Tracing: A Comprehensive Survey - Manuscript 6305-JCS
Published: October 2020. Journal of Computer Science 16(10):1355-1366
DOI: 10.3844/jcssp.2020.1355.1366

PUBLICATIONS

Yeng, P., Yang, B., Fauzi, M.A., **Nimbe, P**. (2023). A framework for exploring incentive methods towards reducing phishing susceptibility in Healthcare: Based on a review and In-the-wild-field study approach

Nti, I.K., Boateng, S., Quarcoo, J.A., **Nimbe, P**. (2023). Artificial Intelligence Application in Law: A Scientometric Review. Artificial Intelligence and Applications. DOI: 10.47852/bonviewAIA3202729

Fauzi, M.A., Yeng, P., Yang, B., Rachmayani, D., **Nimbe, P**. (2023). Examining the Relationship Between Stress Levels and Cybersecurity Practices Among Hospital Employees in Three Countries: Ghana, Norway, and Indonesia. 2023 IEEE 47th Annual Computers, Software, and Applications Conference (COMPSAC). DOI: 10.1109/COMPSAC57700.2023.00209

Mensah, P.K., Akoto-Adjepong, V., Adu, K., Ayidzoe, M.A., Bediako, E.A., Nyarko-Boateng, O., Boateng, S., Donkor, E.F., Bawah, F.U., Awarayi, N.S., **Nimbe, P.**, Nti, I.K., Abdulai, M., Adjei, R.R., Opoku, M., Abdulai, S., Amu-Mensah, F. (2023). CCMT: Dataset for Crop Pest and Disease Detection. Data in Brief. DOI: 10.1016/j.dib.2023.109306

Yeng, P.K., Yang, B. Fauzi, M.A., **Nimbe, P.**, Priharsari, D. (2023). A Framework for Assessing Motivational Methods Towards Incentivizing Cybersecurity Practice in Healthcare. SIET '22: Proceedings of the 7th International Conference on Sustainable Information Engineering and Technology. DOI: 10.1145/3568231.3568285, pp 325–330

Nyarko-Boateng, O., Nkrumah, B., Boafo, V., Amponsah, A., Tetteh, L.A., Aning, J., Oilver, K., Adekoya, F.A., Nti, I.K., Bawah, F.U., Awarayi, N.S., Boateng, S., Mensah, P.K., **Nimbe, P.**, Akoto-Adjepong, V., Agbedanu, P.R., Weyori, B.A. (2022). A Fraud Prevention and Secure Cognitive SIM Card Registration Model. Indian Journal of Science and Technology. DOI: 10.17485/IJST/v15i46.1658, vol 15, Issue 46, pp. 2562-2569

Agbedanu, P.R., Bawah, F.U., Akoto-Adjepong, V., Awarayi, N.S., Nti, I.K., Boateng, S., **Nimbe, P.**, Nyarko-Boateng, O . (2022). BLOCOVID: A blockchain-based COVID-19 digital vaccination certificate verification system, 2022 International Conference on Engineering and Emerging Technologies (ICEET), Kuala Lumpur, Malaysia, pp. 1-6, doi: 10.1109/ICEET56468.2022.10007366.

Mensah, P.K., Ayidzoe, M.A., Opoku, A.A, Adu, K., Weyori, B.A., Nti, I.K., **Nimbe, P.** (2022). Uncertainty Estimation Using Variational Mixture of Gaussians Capsule Network for Health Image Classification. Computational Intelligence and Neuroscience. DOI: 10.1155/2022/4984490

Nimbe, P., Yeng, P.K., Weyori, B.A., Adekoya, F.A., Appiahene, P., Nyarko-Boateng, O., Nti, K.I., Boateng, S., Mensah, P.K., Bawah, F.U., Awarayi, N.S., Akoto-Adjepong, V., Agbedanu, P.R., Ayidzoe, M.A., Mensah, J., Adjei, E.D. (2022). Innovative Approaches to Classical and Quantum Reflected Binary Code Generation using Pascal Triangle, Reversible N-Input C-Gate and Reversible N-Input Q-Gate. Journal of Algebraic Statistics, Vol. 13, No. 3, p. 4708 – 4734

Yeng, P.K., Fauzi, M.A., Yang, B., **Nimbe, P.** (2022). Investigation into Phishing Risk Behaviour among Healthcare Staff. Information, 13, 392, DOI: 10.3390/info13080392

Nimbe, P., Weyori, B.A., Mensah, J., Adekoya, A.F., Adjei, E.D. (2022). Quantum Blockchain: a systematic review. In Shrivas, M.K., Hiran, K.K., Bhansal, A., and Doshi, R. (Ed.). Advancements in Quantum Blockchain With Real-Time Applications, DOI: 10.4018/978-1-6684-5072-7, ISBN13: 9781668450727, ISBN10: 1668450720, EISBN13: 9781668450741, ISBN13 Softcover: 9781668450734

Nimbe, P., Weyori, B.A., Adekoya, A.F. (2022). A Novel Classical and Quantum Cryptographic Scheme for Data Encryption. Int J Theor Phys. DOI: 10.1007/s10773-022-05054-5

Nimbe, P., Weyori, B.A., Adekoya, A.F. Awarayi N.S. (2022). Implementation of Framework for Quantum-Classical and Classical-Quantum Conversion. Int J Theor Phys 61, 37. DOI: 10.1007/s10773-022-04975-5

Nti, I.K., Nyarko-Boateng, O., Boateng, S., Bawah, F.U., Agbedanu, P.R., Awarayi, N.S., **Nimbe, P.**, Adekoya, A.F., Weyori, B.A., Akoto-Adjepong, V. (2021). Enhancing Flood Prediction using Ensemble and Deep Learning Techniques. 22nd International Arab Conference on Information Technology (ACIT). DOI: 10.1109/ACIT53391.2021.9677084, pp. 1-9.

Nimbe P., Weyori B.A., Adekoya F.A. (2021). Rotation of bits: a classical and quantum perspective. Journal of Electrical Systems and Inf Technol 8(4). DOI: 10.1186/s43067-021-00029-8

Nimbe P., Weyori B.A., Adekoya F.A. (2021). Models of Quantum Computing: a systematic review, Quantum Inf Process 20(80). DOI: 10.1007/s11128-021-03021-3

Nimbe P., Weyori B.A., Yeng P.K. (2021). A Framework for Quantum-Classical Cryptographic Translation, Int J Theor Phys 60(1). DOI: 10.1007/s10773-020-04698-5

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Yeng P.K, **Nimbe P.**, Weyori B.A., Solvoll T., Yang B. (2019). Web Vulnerability Measures for SMEs, Proceedings of the 12th Norwegian Information Security Conference, NISK Journal, Vol. 12

Nimbe P., Yeboah F.S., Opoku M. (**2015**). An Efficient Approach to Unifying Electronic Mail Services, International Knowledge Press, Asian Journal of Mathematics and Computer Research, ISSN No. 2395-4205 (Print), 2395-4213 (Online), Vol.: 8, Issue: 4, pp. 317-326

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Opoku M., Davis J.G., **Nimbe P. (2015**). Evaluation of the Smartphone Platforms: A Case Study with Android, iOS and Windows Phones, International Knowledge Press, Asian Journal of Mathematics and Computer Research, ISSN No. : 2395-4205 (Print), 2395-4213 (Online), Vol.: 6, Issue: 1, pp. 72-92

Nimbe P., Hayfron-Acquah J.B., Weyori B.A. (**2015**) Performance, Security and Statistical Analysis of Nimbe Cipher 1 (NC1), International Knowledge Press, Asian Journal of Mathematics and Computer Research, ISSN No. : 2395-4205 (Print), 2395-4213 (Online), Vol.: 6, Issue: 1, pp. 37-60

Nimbe P., Hayfron-Acquah J.B., Weyori B.A. (2015). An Improved Symmetric Cipher Encryption For Securing Data, International Knowledge Press, Asian Journal of Mathematics and Computer Research, ISSN No. : 2395-4205 (Print), 2395-4213 (Online), Vol.: 4, Issue: 3, pp. 139-154

Nimbe P., Okyere E., Weyori B.A. (2015). An Alternative Technique For Finding the Nth Root of Real Numbers, International Knowledge Press, Asian Journal of Mathematics and Computer Research, ISSN No. : 2395-4205 (Print), 2395-4213 (Online), Vol.: 3, Issue: 1, pp. 32-39, April 2015

Nimbe P., Opoku M., Frimpong S.O. (2015). Hashing String Keys Using NFO and NOF Collision Resolution Strategies, International Journal of Innovation and Scientific Research ISSN 2351-8014 Vol. 13 No. 1, pp. 89-97

Nimbe P., Opoku M., Frimpong S.O. (2014). Hash Table Collision Resolution Using a Multi-dimensional Array, International Journal of Innovation and Scientific Research ISSN 2351-8014 Vol. 9 No. 2, pp. 258-267

Nimbe P., Frimpong S.O., Opoku M. (2014). An Efficient Strategy for Collision Resolution in Hash Tables, International Journal of Computer Applications (0975 – 8887) Volume 99–No.10, pp. 35-41

THESIS & DISSERTATION

2022	Quantum-Classical and Classical-Quantum Crypto Program Translation	PhD
2014	An Improved Symmetric Cipher Encryption for Securing Data	MPhil.
2009	SVD Information Management System	B.Sc.

COMMUNITY SERVICE

2022	Evangelism, Preaching and Counselling I Sunyani Technical University
2019	Evangelism, Preaching and Counselling I Odumaseman Senior High School
2018-2020	Evangelism, Preaching and Counselling I Sunyani Nursing & Midwifery Training College - SNMTC
2016-Current	Evangelism, Preaching and Counselling I UENR
2014-2020	Evangelism, Preaching and Counselling I CUCG
2014	Barcamp Sunyani 2014
	Theme: Growing a green economy

November 22 I VAG HALL - SUNYANI
http://www.barcampghana.org/barcamp-sunyani-2014-growing-a-green-economy/
Role Played: Mentoring

2013　　　　Barcamp Sunyani 2013
　　Theme: Energizing the resource base in Sunyani to act.
November 9 I UENR
http://www.barcampghana.org/register-for-barcamp-sunyani-2013/
https://mightyafrican.blogspot.com/2013/12/enegerizing-resource-base-in-sunyani-to.html
Role Played: Mentoring

2012　　　　Barcamp Sunyani 2012
　　Theme: First-ever Barcamp Sunyani -- The experience.
April 21 I UENR - Faculty of Forest Resources Technology (KNUST - SYI)
https://qaphui.blogspot.com/2012/04/1st-ever-barcamp-sunyani.html

POSTGRADUATE THESIS INTERNAL ASSESSMENT (Msc/MPhil)

2023　　　　Detection and Classification of Solid Waste in Urban Environments Using Deep Learning I UENR

2023　　　　Facial Emotional Recognition Using an Optimized Convolutional Neural Network I UENR

2023　　　　Modeling the Relationship between Land Surface Temperature and Land Use/Land Cover: Machine Learning Approach I UENR

2023　　　　Fault Prediction in 4G/LTE Mobile Telecommunication Network Using Machine Learning I UENR

2023　　　　Vulnerability Assessment of Web Applications: Security, Threats, Countermeasures and Pitfalls I UENR

POSTGRADUATE THESIS SUPERVISED (Msc/MPhil/PhD)

2023　Comparative Analysis of Quantum Software Development Kits I UENR
2023　National Quantum Mission to Scale-up Scientific and Industrial Research in Ghana I
　　　　UENR
2023　Strengthening Cybersecurity in Africa Using Quantum Machine Learning I UENR
2023　A Classical Blockchain and Quantum Encryption Approach to Ensuring Transparency, Security and Immutability of the Land Ownership Process in Ghana I UENR

UNDERGRADUATE STUDENT PROJECT WORKS SUPERVISED (BACHELORS & DIPLOMA)

2023　　　　An Optimized Xception Model For Lung Cancer Detection Using CT Scan Images I UENR
2023　　　　A Stroke Prediction Model With Machine Learning I UENR
2023　　　　Electronic Waste Management System I UENR
2023　　　　Ensuring Food Security Using Blockchain Technology in Ghana: Opportunities, Challenges and Recommendations I UENR
2023　　　　Online Medical Consultation Application I UENR

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Year	Project	Institution
2023	Online Real Estate Hub	UENR
2023	Student Information Management System for School of Sciences	UENR
2021	Greener FM Management System	UENR
2021	District Education Office Information Management System (DEOIMS)	UENR
2021	Design and implementation of E-Commerce Website	UENR
2021	RentaRoom Software	UENR
2021	Design and Implementation of a Web-Based Alumni Tracking System for University of Energy and Natural Resources	UENR
2021	E-library Management System	UENR
2021	Pizzeria Ordering System	UENR
2021	Vehicle Management System for Danfos Auto Engineering and Consultancy	UENR
2021	UENR Management Information System	UENR
2021	Waste Management System in Rural and Urban Areas Using Internet of Things	UENR
2020	Designing a Website for the Department Of Computer Science and Informatics on UENR Campus	UENR
2020	Design and Implementation of a Pharmacy Information System: Case Study at Opportunity Herbal Clinic	UENR
2020	Design and Implementation of a Computerized Universal Point of Sales	UENR
2020	A Systematic Review of Pharmacy Information Systems	UENR
2020	Design and Implementation of Facility Management System (A Case Study of UENR Estate Office)	UENR
2019	IOT Based Smart Home Energy Management Application	UENR
2019	Tracking and Monitoring System for Ghana	UENR
2019	Mobile Application for Visually Impaired Students	UENR
2018	Predicting Air Pollution with Artificial Neural Networks	UENR
2018	Developing a Backbone Database System (Ghana as a case study)	UENR
2018	Digital Signature Verification using Artificial Neural Networks	UENR
2018	Intelligent Hybrid Algorithm for Municipal Waste Prediction (Case study of Sunyani Municipality)	UENR
2018	Load control management in intelligent networks	UENR
2018	Mobile Application to enhance client services of sanitation agencies, Case Study – Zoomlion	UENR
2018	Intelligent Approach to Predicting Power Generation	UENR
2017	Cloud Records Management (Patients Records)	CUCG
2017	University Systems (Website, Student, Lecturer Portal)	CUCG
2017	Airline Reservation System	CUCG
2017	Election Monitoring System	CUCG
2017	Ticketing and Tracking System for Interschool Games (SET)	CUCG
2016	Instructional Assistant for Junior High School (An Automated Teaching Assistant)	CUCG
2016	Disease Outbreak Monitoring System	CUCG
2016	An E-Commerce Application for Electronics Consumables	CUCG

SOFTWARE PROJECTS UNDERTAKEN

Hospital Management System
Microfinance System (MiFi)
National Climate Change Expert Mapping System
Electronic Voting System
SVD Information Management System (SIMS)
Didactic Portal

SKILLS

Quantum Computing (Python, Qiskit, Cirq, jsqubits)
Information Security & Cryptography
Cybersecurity
Full-Stack Quantum Computation
Quantum Machine Learning
Web Programming (Python, Django, React)
Software Engineering
Data Analytics Programming (Python and Pandas)
Blockchain Technology

LINKS

Research Gate: https://www.researchgate.net/profile/Peter-Nimbe

LinkedIn: https://www.linkedin.com/in/dr-peter-nimbe-945b1b32/

RECOMMENDATIONS

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