TAMUKA NIGEL SAMURIWO

Date of birth: 13/03/1997 | **Nationality:** Zimbabwean | **Gender:** Male | **Mobile:** +27655621705 / +27691370554 | **Email Address:** tamukanigelsamuriwo@gmail.com | **LinkedIn:** https://www.linkedin.com/in/tamukanigelsamuriwo/

WORK EXPERIENCE

KUCH DIRECT IT SOLUTIONS

FRONTEND WEB DEVELOPER (Freelance and remote) / September 2023 - *Present*   *Tygervalley, Cape Town, Republic of South Africa*

With this experience, I am currently strengthening my software skills for cloud computing and full-stack development. The goal is to bridge the gap between electronics and software design.

- Collaborate with clients to understand project requirements, goals, and design preferences. | Develop responsive and visually appealing websites, ensuring optimal user experience across various devices and browsers. | Implement modern frontend technologies, including HTML5, CSS3, and JavaScript frameworks, to create interactive and dynamic web pages. | Utilize WordPress and its third-party plugins to translate design concepts into functional and intuitive user interfaces. | Conduct thorough testing and debugging to ensure cross-browser compatibility, performance optimization, and seamless functionality. | Integrate third-party APIs and tools to enhance website features and functionalities. | Provide ongoing maintenance and support, addressing client requests and resolving issues promptly. | Collaborate with cross-functional teams to meet project deadlines and deliver high-quality results.

NEWBRIDGE GRADUATE INSTITUTE

ELECTRONIC ENGINEERING LECTURER (Part Time) / July 2023 - December 2023   *Tygervalley, Cape Town, Republic of South Africa*

Devoted to passing on knowledge based on control systems and analogue transistor electronics modules.

- Engaged undergraduate students with lectures on control systems and analogue transistor electronics for 8 hours weekly. | Provided comprehensive explanations of fundamental concepts, such as circuit analysis, semiconductor devices, BJT/FET amplifiers, feedback control, stability analysis, and frequency response. | Created and maintained course/module materials, such as homework assignments, lab activities, and lecture notes for the 12 academic weeks. | Utilized cutting-edge teaching strategies to improve student comprehension, such as 3 practical demonstrations and real-world examples. | Conducted 20 assessment types and tests and graded each. | Offered helpful criticism to foster student development. | Collaborated with colleagues on projects to develop and improve the curriculum. | Continuous monitoring of industrial developments and new technology in electronic engineering. | Incorporated Kahoot for fun-related quizzes for students

STELLENBOSCH UNIVERSITY

DEMI (Demi-ship/Assistantship) / August 2021- November 2022   *Stellenbosch, Republic of South Africa*

Apprenticeship for a first-year module, Electro-techniques, from August 2021 to November 2021 and from July 2022 to November 2022. I spearheaded the facilitation of first-year engineering students in;

- weekly tutorials | operation of the technical laboratory equipment | the comprehension and utilization of the LTSpice SPICE engine | marking and recording marks from the students' practical reports on the Microsoft Excel spreadsheet | attending queries on the module online forum | invigilation of A1 assessment

From February 2022 to June 2022, assisted in Data Analytics in Machine Learning module for third-year students and was accountable for administering students with;

- the understanding of Python Programming in Machine Learning algorithms | the application of Engineering Statistics in Python programming | weekly tutorials in Visual Studio Code and Google Colab tasks | arranging student marks in the Microsoft Excel spreadsheet | queries on an online forum

As a result, students grasped the concepts of circuit theories and Machine Learning algorithms such as linear regression and clustering methods, utilization of python programmed machine learning tools such as NumPy and pandas, and application of electrical engineering lab equipment and measurements such as the function generator, oscilloscope, digital multi-meter, breadboard, etc.

IAESTE U.S.A.

Technical Leadership Program Trainee / July 2021- August 2021   *United States of America (online)*

Completed a 6-week program that IAESTE U.S.A. and professors from CARNEGIE MELLON UNIVERSITY hosted. The training provided includes; 1. how sensors, sensing, and perception work together, 2. how to deal with errors in results calculated using technical measurement methods, and 3. a wide application of artificial intelligence, specifically in disaster response for example the use of an advanced ultrasonic sensor to find a pathway through a building that caught on fire.

- Designed an intelligent water treatment system that: implements 2 filtration methods and at least 3 sensors to detect the levels of water impurity | achieved durability and efficiency economically | Implemented the technical measurement methods for error management to my design.

NEU INNOVATION AND INFORMATION TECHNOLOGIES CENTER

IT and Computer Hardware Technician Intern / April 2018 - June 2018   *Nicosia, Mersin 10, TRNC/KKTC, Turkey*

Engineering intern at Near East University's Innovation and Information Technologies Center in the ICT and Hardware department.

- Devised the installation, examination, tests, and reparation of computer hardware and peripherals components | Tested and identified the problems on computers or desktop computers | Replaced damaged components on computers or desktop computers up to 100% efficiency with a detailed report after each task | Successfully executed the physical configuring and testing of ethernet cables (utilized 6 types, Cat 5, 5e, Cat 6, 6a, 7, and Cat 8) | Set up IPv4 and IPv6 addresses for wireless routers for university buildings | Resolved internet routing problems | Achieved the formatting/backing up/cloning of hard disks along with installing drivers, operating systems (for Linux, and Windows), and applications | Gained experience to repair my own devices.

NETWORKS AND MEMBERSHIPS

NEAR EAST CAVING CLUB

November 2017- August 2020   *Nicosia, Mersin 10, TRNC/KKTC, Turkey*

Part of the founding committee. Trained by the club advisor (a caving expert) on 5 aspects; using cave equipment, safety precautions, teamwork, climbing, and descending single rope technique using the gears and mapping.

- Organized at least 2 camps, hikes, cave cleaning, and exploring trips per semester | Collaborated with the Association of Cave Enthusiasts (Cyprus, EU) in camps for the Caves of Kyrenia Project | Trained new members on the 5 caving aspects | Collaborated with SPOT Cyprus and Leap to Peak in a 3-day beach cleaning and camping

URLs: https://www.instagram.com/caving_club/ | https://youtu.be/__mLhpP2VL0

EDUCATION

STELLENBOSCH UNIVERSITY
Master of Engineering in Electronics Engineering (Research)
Thesis: Expansion of the RSFQ digital cell library | Website: http://www.sun.ac.za/english

Stellenbosch, Republic of South Africa
March 2021– December 2023

NEAR EAST UNIVERSITY
Bachelor of Science in Electrical and Electronics Engineering
CGPA: 3.71 out of 4.00 | Website: https://neu.edu.tr/?lang=en

Nicosia, Mersin 10, TRNC/KKTC, Turkey
March 2016– January 2020

SKILLS / INTERESTS

LANGUAGES: *Shona* (native) | *English* (fluent) | *Turkish* (basic). **DIGITAL SKILLS**: Microsoft Teams | Algorithms and Artificial intelligence | Integrated development environment | LaTex | Microsoft Office Suite (Word, PowerPoint, Excel, Outlook) | LTSpice | MATLAB | Multisim | SIMULINK | Hardware: Arduino Uno, mega, due, ESP8266 | Programming: C, C++, Python 3, CSS3, HTML5, JavaScript | Ladder Logic, Instruction List, Function Block Diagram (PLC) | PLC and SCADA automation | Command Prompt & PowerShell | Visual Studio Code | Jupyter Notebook | Google Colab | Inkspace | Fabrication Process (Embedded Systems) | KLayout | Zoom. **OTHER**: Time Management | Team-work oriented | Research and analytical skills | Innovative | Facilitation | Data Management | Communication and Coordination | Research Integrity | Content Development. **INTERESTS**: Gym | Soccer | Watching Formula 1 | Volunteering Activities | Outdoor: Camping, hiking, rock climbing, caving | Chess | Technology | Traveling | Music.