NTUTHUKO KHOZA

DEVELOPER ENGINEER / ELECTRONICS ENGINEER

PROFILE

An exceedingly driven individual with a penchant for innovative perspectives, I am naturally infused with energy, determination, and a resolute spirit. I am excited to pursue a career within your esteemed company, where I believe that confronting challenges is an essential catalyst for personal and professional development.

My orientation is deeply business-focused, fueled by a fervent desire for growth and an insatiable appetite for success. I excel in optimizing resources to propel the company's productivity, with the ultimate aim of achieving maximum efficiency and effectiveness.

CONTACT

PHONE:

061-482-3958

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EDUCATION

University of Johannesburg
2018 - 2021
Bachelor of Engineering Technology in Electrical Engineering

Ekurhuleni West College
2017 - 2018
N4 Electrical Engineering

WORK EXPERIENCE

Company: Optix   **Position: Development Engineer**
01/11/2022–Present Day

As a Development Engineer at Optix, I use my proficiency in Python and various languages to drive various technical aspects of our operations in Software Engineering.

I manage off-site testing stations in New Zealand and Australia, provide vital AI product support, and My role extends to the realm of Web Application Development, where I leverage my skills to craft intuitive and impactful online applications. Additionally, I skillfully manage cloud computing services on AWS, contributing to a well-rounded skill set that enhances various aspects in operations.

By integrating Python-based GUI automation into our product lines and employing it in the intricate process, I relentlessly pursue the creation of pioneering solutions aimed at optimizing operational efficiency.

Orchestrated end-to-end PCB design initiatives on a significant production scale, ensuring seamless integration into field-deployed products.

Company: DriveRisk   **Position: Engineering Technician**
01/04/2022 – 01/11/2022

Repairing AI safety Vehicle cameras, Testing and troubleshooting vehicle safety equipment

Interpersonal Skill Set

Proactive Approach: Forward-thinking methodology, anticipating potential technical challenges and initiating preemptive measures to optimize project outcomes.

Effective Communication in Technical Contexts.

Teamwork and Collaboration: Proficiently align team efforts toward cohesive engineering objectives.

Adaptability: a resilient approach in rapidly evolving technical landscapes, swiftly assimilating new methodologies Adept at navigating dynamic challenges while upholding engineering excellence.

Time Management: deterministic judgment, and acute observance contributing to impeccable precision.

Leadership and Mentoring: Exhibit exemplary technical leadership by inspiring & proficiently mentoring emerging talents, instilling technical rigor, and fostering a culture of continuous learning.

Problem Solving: systematic fault diagnosis: troubleshooting across intricate technical systems**.**

Extracurricular pursuits

➔ PCB Design and Prototyping

➔ Cross-Platform Application Development with Specific Languages.

➔ Precision Woodworking for Outdoor Furniture Fabrication

References

Reference: Rodger Minnaar
Contact: 072-566-8616
Position: Technical & Product Assurance Manager

PROJECTS:

- **Large-Scale PCB Design for Field Products**: **Hibernation Board**

Designed Step down Voltage regulator circuit with 4 channel 12V outputs integrated with IC logic for Hibernation purposes.

If the IC is triggered with an earth line the circuit will switch on and output the 4 channels, if the earth falls away the PCB will stay on supply the channels in hibernation for a period of one hour then switch off.

https://www.linkedin.com/posts/ntuthuko-khoza-200087224_just-finished-with-my-pcb-design-activity-7092798058232524800-x_ZB?utm_source=share&utm_medium=member_desktop

- **Cloud-Enabled Infrastructure Optimization**: **AWS hosted Stock System**

Inherited project and continued to direct initiatives to optimize cloud infrastructure using Python, Flask Html, CSS & Java Script enhancing scalability and tracking of stock between departments to ensure cost-effectiveness.

- **Efficiency-Driven Harness Tester: GUI Automation on Raspberry PI**

Pioneered automation solutions for complex harness tester utilizing GPIO & GPIO Expansion IC, optimizing operations through systematic undertakings. The creation of a robust Python-based GUI automation framework integrated to test hardware, driving efficiency improvements across quality assurance endeavors and results within seconds.

TECHNICAL COMPETENCIES:

- Programming Languages: Python (Fluent), AWS cloud Computing, JavaScript.

- Web Development: HTML, CSS, Flask (Fluent)

- Data Analysis: R (Intermediate), SQL (Fluent)

- Tools: Git, Visual Studio Code, Jupyter.

- Frameworks: Django, React (Basic familiarity)

- Operating Systems: Windows, Linux, Ubuntu

PROFICIENCIES

Proficiency	Percentage
AWS Cloud Computing	85%
Raspberry PI & Microcontrollers	87%
PCB & Embedded Design	85%
Data Analysis Proficiency	85%
Innovative Engineering	90%