Cables, Code & Change


01
Origins

Industrial Thika Roots

01

Thika’s Unique Setting

Thika, Kenya, is a unique blend of industrial activity and agricultural roots. Surrounded by pineapple and coffee plantations, the town is also a hub for manufacturing and commerce. This dynamic environment sparked my curiosity about systems and connections.

02

Early Exposure to Systems

Growing up in Thika, I was constantly exposed to the interplay of human, resource, and technological systems. The bustling roads, factories, and markets taught me to observe patterns and processes, laying the foundation for my future interests.

03

Curiosity Ignited

My fascination with how things work began in Thika. Watching trucks, machines, and market interactions, I developed a deep curiosity about the mechanics behind everyday systems, which later drove my exploration of technology and innovation.

CONTENTS

Single-Parent Discipline

Resilient Mother

Raised by my resilient mother, Trizah Wamiti, I learned the value of hard work and discipline. Her unwavering commitment to providing a stable life under financial constraints taught me the importance of resourcefulness and perseverance.

Early Financial Lessons

My mother's lessons on budgeting, delayed gratification, and the importance of every shilling instilled in me a strong sense of responsibility. These early financial lessons shaped my approach to problem-solving and resource management.

Curiosity & Early Experiments

Dismantling Curiosity

My curiosity led me to dismantle old cassette players and radios, driven by a desire to understand their inner workings. Each experiment, even the failed ones, taught me valuable lessons in iterative problem-solving.

Iterative Learning

Through trial and error, I learned that failure is not an endpoint but a learning opportunity. This mindset of iterative improvement became central to my approach to engineering and machine learning.

Analytical Mindset

These early experiments fostered an analytical mindset, teaching me to break down complex systems into smaller components and understand their functions. This skill later translated into my work with software and infrastructure.

Synthesis Over Analysis

My mother's encouragement to view failures as incomplete experiments instilled in me the importance of synthesis. Understanding how parts fit together to form a functional whole became a guiding principle in my technical journey.

02

Education

High-School Hustle

Nyahururu High School Experience

At Nyahururu High School, the rigorous academic environment, cold dormitories, and football midfield drills taught me endurance, teamwork, and time-management skills. These experiences prepared me for the disciplined approach required in coding and collaborative tech projects.

University Code Spark

Awakening to Programming

My first successful Python debug at Dedan Kimathi University felt like acquiring a superpower. It transformed abstract logic into tangible results, cementing my belief in software as a tool for widespread impact.

Algorithmic Mastery

Courses in algorithms and data structures sharpened my problem-solving skills. Learning to break down complex problems into manageable parts and apply logical solutions became a cornerstone of my technical expertise.

Infant Mortality ML Mission

Project Overview

My final-year machine-learning project aimed to predict neonatal risk using messy Kenyan datasets. This project merged technical rigor with ethical responsibility, highlighting the potential of data science to address real-world health challenges.

Technical Challenges

The project involved data preprocessing, feature engineering, and model tuning. Using logistic regression, random forests, and gradient boosting, I learned the importance of precision and iteration in developing effective predictive models.

Ethical Considerations

The project emphasized the ethical implications of data science. Ensuring high recall rates to identify at-risk infants underscored the importance of developing technology that serves community health and saves lives.

03

Field & Self

Fiber Cabling Reality

AgapeTECH Experience

My industrial attachment at AgapeTECH Fiber Cabling Company was a hands-on lesson in precision. Trenching mud, splicing delicate fibers, and hauling heavy spools taught me the importance of reliable physical infrastructure.

Humidity and temperature fluctuations posed significant challenges during fiber splicing. Systematic observation and micro-adjustments were crucial in achieving stable connections, reinforcing the need for adaptability in fieldwork.

Team Collaboration

Collaborating with my team to troubleshoot and solve problems under challenging conditions highlighted the importance of communication and collective effort in overcoming obstacles.

Humility and Respect

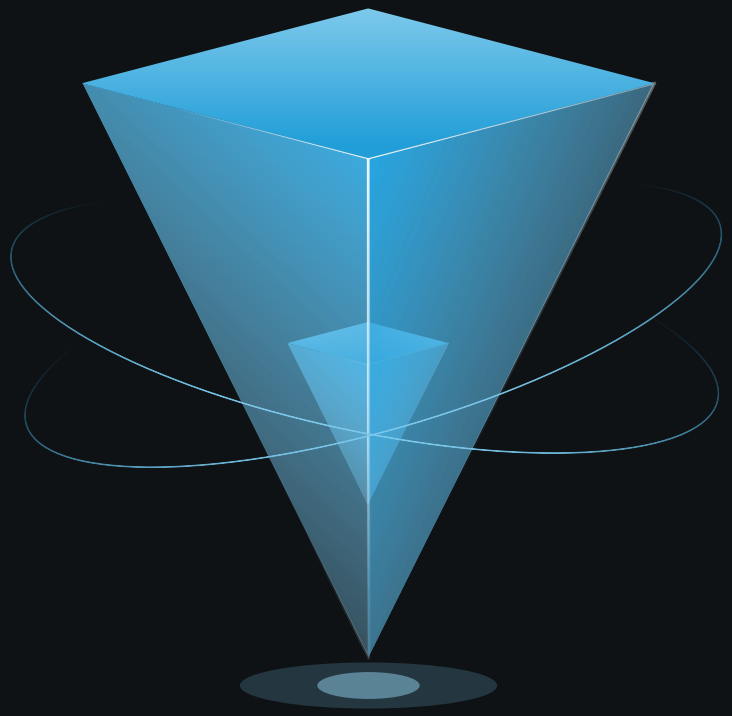
The experience taught me humility and respect for the tangible foundations of technology. Without reliable infrastructure, even the most sophisticated software is powerless.

Endurance via Cycling

Cycling as Training

Long-distance cycling in hilly terrain taught me the value of incremental progress, pacing, and mental focus. These lessons translated directly into my professional life, where patience and perseverance are essential for tackling complex projects.

Chess & Football Codes



Chess and Strategic Thinking

Chess honed my strategic thinking and foresight. Anticipating moves and evaluating trade-offs sharpened my ability to plan and execute complex projects, a skill crucial in system architecture and data analysis.

Football and Teamwork

Playing football taught me the importance of coordination, communication, and trust. These collaborative skills are essential in both group projects and professional teamwork, driving impactful solutions through collective effort.

04

Vision

Cables + Code Fusion

01

Holistic Approach

True innovation requires a holistic approach, combining reliable physical infrastructure with intelligent software. This fusion ensures that technological solutions are both robust and scalable.

02

Contextual Design

My experience taught me to design solutions that are contextually relevant. Predictive models must be adapted to local conditions, such as weak rural networks, to ensure their effectiveness and impact.

03

Resilient Ecosystems

By integrating cables and code, I aim to create resilient technological ecosystems that can withstand real-world challenges, driving sustainable progress in African communities.

HealthTech & AgriTech Goals

HealthTech Vision

I aim to develop low-bandwidth machine-learning diagnostics that can operate on basic mobile devices. These tools will empower community health workers to identify and address neonatal risks in remote areas, improving healthcare outcomes.

AgriTech Innovation

In AgriTech, I envision using vision-based pest detection and predictive analytics to optimize crop yields for smallholder farmers. Ethically tuned algorithms will enhance food security and economic stability.

Kenyan Innovation Hub Dream

Long-Term Vision

My long-term goal is to establish an African AI hub in Kenya. This hub will mentor youth, foster open-source tools adapted to local realities, and export ethical tech solutions that transform continental challenges into globally respected innovations.

THANK YOU

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