

**TITLE: AUTOBIOGRAPHY OF
NDUGUYA COLLINS WAWERU
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**INSTITUTION: DEDAN KIMATHI
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**DEPARTMENT: COMPUTER SCIENCE
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Introduction

My journey of self-discovery began with a restless curiosity and an endless stream of questions, a drive to understand the world around me and my place within it. Growing up in Nanyuki, my parents instilled in me strong guiding values: family first, hard work, commitment, wisdom, cleanliness, and faith. Our dinner table was more than a place to eat; it was a hub of learning, laughter, and reflection, teaching me the importance of attentive listening and thoughtful consideration. Christianity provided the spiritual backbone of our lives, with church attendance and family prayers shaping our daily routines.

As a child, I was hyperactive, headstrong, and relentlessly inquisitive, quickly earning a reputation as a fast learner. Yet, my early years were not without challenges. Born underweight and struggling with bedwetting throughout primary school, I often felt a step behind my peers. These experiences tested my resilience, cultivated empathy, and instilled in me a quiet determination to grow, adapt, and overcome.

This essay is not merely a chronicle of milestones but an exploration of the influences, people, and experiences that have shaped who I am. From that persistent, curious child to a determined Full Stack Web Developer, my journey has been defined by growth, adversity, and the values that continue to guide me today.

Chapter 1: The Formative Years

Home and Early Environment

Nanyuki was more than just an address -it was a community within a community. Neat hedges lined the red-soil walkways, and the laughter of children often mingled with the hymns rising from open windows on Sundays. My parents, Eliud , cultivated a home where every meal, chore, and conversation reflected the belief that family always comes first. The walls were adorned with family photos and Bible verses, and the lessons my parents shared shaped the rhythm of our household.

Daily life revolved around Christian faith and disciplined routines. Mornings began with prayer for wisdom and protection, while evenings ended with reflections on lessons learned or small victories achieved. My father often reminded us, "If you do something, do it well," a simple but powerful maxim that guided our approach to studies, chores, and interactions. Cleanliness and

order were non-negotiable, valued not only for their practicality but also as a mark of respect for oneself and others. My mother's storytelling, rich with Kikuyu proverbs, taught lessons in honesty, humility, and wisdom, showing me that insight could be drawn from both the sacred and the everyday.

The emphasis on hard work and commitment permeated every aspect of my childhood. Whether organizing books or completing household tasks, I quickly learned that consistency and diligence were expected. Observing my parents honor their commitments with quiet determination instilled in me the value of perseverance. Their combination of tradition and faith also nurtured pride in my Kikuyu heritage, while Christian teachings provided a moral compass that would guide me into adulthood.

Early Memories and Challenges

From a young age, I was marked by boundless energy and an insatiable curiosity. My siblings and parents often joked that I was fueled by a never-ending stream of questions and ideas—sometimes inspiring admiration, sometimes playful exasperation. Whether chasing grasshoppers in the backyard or bombarding my mother with “why” and “how” as she cooked, I sought to understand the workings of both nature and people.

Yet, this curiosity often walked a fine line. Teachers sometimes described me as “persistent” or even “nagging” when my questions interrupted lessons. At family gatherings, my tendency to challenge folk wisdom or probe deeper into stories often elicited good-natured teasing. Despite this, these traits fueled a genuine desire to learn and grow, turning every experience—a book, game, or conversation—into an opportunity for discovery.

Behind my enthusiasm, however, lay quieter struggles. I was born underweight and faced persistent bedwetting well into primary school. Mornings at boarding school were filled with anxiety: the silent rush to hide damp sheets before dorm-mates awoke and the lingering embarrassment that followed. Being teased hurt, but it also sparked a determination to overcome limitations and prove that no obstacle was insurmountable.

Primary School Life

At Kihome Primary School, my academic journey accelerated as I consistently ranked among the top three students from Class 4 through 8. Meeting the high expectations of both teachers and family demanded focus, adaptability, and perseverance. The competitive yet supportive environment encouraged me to embrace intellectual challenges, refine my study habits, and find satisfaction in both the process and the results.

Beyond academics, I thrived in extracurricular activities. Serving as school scout captain in Classes 7 and 8 taught me leadership, responsibility, and teamwork. Contributing as the football team's best defender led us to county-level victories. Rigorous training in sports and scouting instilled discipline, humility, and resilience - lessons that would leave a lasting imprint on my character and confidence.

Boarding life from Class 6 introduced structure and self-reliance amidst communal living. Scout camps, survival tasks, and cold nights under canvas pushed me beyond my comfort zone, nurturing adaptability and mental toughness. Though bedwetting and occasional embarrassment presented challenges, these experiences became opportunities to develop resilience, self-reliance, and perspective. I learned to separate self-worth from setbacks and view vulnerability as a teacher rather than a weakness.

Academic excellence sometimes drew jealousy or mild bullying, but I learned to respond with self-control and focus on meaningful pursuits. Over time, I cultivated a small circle of loyal friends, chosen for trust and shared values, who became my confidants and support system. This inner circle, alongside my siblings, helped anchor me through difficulties and taught me that the depth of friendships matters more than their number.

These formative years, shaped by the values instilled at Vineyard Estate and the discipline of Kihome Primary School, laid the foundation for resilience, leadership, and meaningful relationships - preparing me for every chapter that followed in my journey.

Chapter 2: University Life and the Genesis of a Developer

Arriving at Dedan Kimathi University of Technology in September 2022 marked a pivotal moment in my life—a new chapter where academic ambition intersected with real-world application. Enrolling in the Bachelor of Science in Computer Science program, I was eager to explore the algorithms, architectures, and systems that power the digital world.

Soon, I realized that university was more than an academic journey; it was a crucible that tested and strengthened every aspect of my character—intellect, resilience, discipline, and creativity.

Academic Challenges and Achievements

The transition from high school to university was both exhilarating and challenging. The curriculum was rigorous, demanding more than memorization—it required critical thinking, problem-solving, and practical application. I engaged with topics ranging from advanced Data Structures and Algorithms to Software Engineering methodologies and Database Management, gaining a comprehensive view of the computer science discipline.

The first semesters presented moments of uncertainty: complex assignments, intense group projects, and theoretical exams that pushed my limits. Guided by the values instilled during my upbringing—hard work, perseverance, and commitment—I dedicated myself to disciplined study habits. Long nights debugging code, frequent consultations with professors, and active participation in study groups became routine.

This dedication paid off. Throughout my university journey, I have maintained a record of zero supplementary exams, a reflection of consistent effort, focus, and the pursuit of mastery. This achievement was neither accidental nor easy; it was the result of steady progress and seeking support whenever challenges arose.

The Freelancing Journey

Alongside my academic pursuits, I ventured into freelancing, a vital avenue that supplemented my income while grounding my knowledge in practical experience. Early in university, I began

taking on web development projects for a variety of clients, from local entrepreneurs to small NGOs.

Freelancing was both exhilarating and steep in its learning curve. I navigated client communication—eliciting clear requirements, negotiating realistic timelines, and managing budgets. Technical challenges were abundant: adapting to diverse technology stacks, integrating payment systems for e-commerce clients, and optimizing websites for speed, accessibility, and responsiveness.

My services ranged from designing responsive front-end interfaces and building backend data management systems to implementing secure user authentication protocols. Each completed project strengthened my portfolio and confidence, while each dissatisfied client offered lessons in expectation management.

Through freelancing, I honed time management, client empathy, and an understanding of the iterative nature of real-world development, where pragmatism often balances perfection. Handling multiple projects simultaneously sharpened my organizational skills, while troubleshooting unique client problems expanded my technical versatility and problem-solving capabilities.

Cultural Narratives and Moral Lessons

From a young age, I was captivated by stories told with expressive rhythm and intonation, each pause and rising inflection adding suspense or humor. My mother would often conclude, “Even when the hyena thought he was smarter than everyone, his greed led to his downfall,” locking eyes with me as if to say, “Pay attention.” Through these stories, I learned that ethics are more than abstract rules—they are lived values, tested and passed down through generations. Lessons of honesty, humility, generosity, and resilience shaped my character far more deeply than any classroom lesson could.

Cultural Rituals and Their Life Lessons

Culture becomes truly tangible when experienced firsthand. For every Kikuyu boy, the rite of circumcision represents a pivotal milestone. When I underwent this ritual, I felt both fear and excitement, recognizing it not merely as a physical change, but as a passage into adult responsibility.

In preparation, my father and uncles shared stories of their own experiences, imparting wisdom through proverbs and encouragement. The ritual symbolized the shift from childhood dependence to expectations of fortitude, moral integrity, and responsible adulthood. What left the deepest impression were not the ceremonial details, but the lessons that followed: courage, dignity, respect for others, and the responsibility of carrying one’s family name with honor.

Beyond circumcision, other cultural rituals—naming ceremonies, weddings, and annual blessings—reiterated the importance of community. Through these experiences, I learned humility, respect for elders, patience in adversity, and the value of collective good over individual gain. Culture taught me resilience, empathy, and patience—lessons no formal curriculum could fully provide.

The Broader Role of Culture

In our family, culture was dynamic and lived. It influenced everything from how we greeted elders to the responsibilities assigned by birth order. Gender roles and duties were framed within rituals and stories: sons were expected to honor and care for elders, daughters to uphold family dignity, all within a structure of respect and mutual support.

Through culture, I learned that personality and moral judgment are forged within a community of traditions, expectations, and role models. One's identity in the Kikuyu context is intertwined with these practices—sometimes embraced, sometimes questioned, and often adapted as society evolves. Morality and ethics, too, were deeply rooted in tradition: deceit or cruelty carried consequences, while patience and integrity were their own reward. Even as Western influences permeated education and media, these inherited values remained the ethical backbone of my character.

Chapter 3: Internships and the Early Professional Journey

Stepping Into the Professional World

The transition from academic learning to hands-on professional experience was both exhilarating and humbling. In November 2024, I joined **Mteja** as a Software Development Intern. It was my first formal exposure to the workplace, where I quickly realized that theoretical knowledge, while essential, was only part of the story. Here, communication, teamwork, and adaptability were as critical as coding skills.

My tasks spanned software testing, IT support, and front-end development. I collaborated with senior developers to build responsive web interfaces using **Vue.js**, **Vuetify**, and **Tailwind CSS**, translating user requirements into functional, aesthetically pleasing applications. Observing and participating in architectural discussions highlighted the importance of planning for scalability and performance—lessons no textbook could fully convey.

Developing a Problem-Solving Mindset

Internships demanded proactive thinking. No longer could I rely solely on guidance; I had to anticipate challenges, research solutions, and implement them effectively. Whether debugging a stubborn bug, optimizing a database query, or suggesting enhancements to the user interface, every task became a learning opportunity.

This period reinforced the values ingrained in me since childhood: perseverance, attention to detail, and humility. Mistakes were inevitable, but with mentorship and reflection, each misstep became a stepping stone toward competence and confidence.

TEACH2GIVE Internship: Applying Knowledge at Scale

In February 2025, I joined TEACH2GIVE for a second internship, focusing on more complex software development projects. Here, I participated in Agile sprints, daily stand-ups, and sprint reviews, collaborating with multidisciplinary teams to deliver user-centered solutions.

I developed modern, responsive front-end applications using Angular and Tailwind CSS, ensuring seamless user experiences across devices. Integrating these interfaces with secure, scalable RESTful APIs provided a practical understanding of end-to-end system development. I also conducted unit and integration testing using Jest, further improving application reliability and performance.

These experiences underscored the importance of balancing technical proficiency with soft skills: communication, teamwork, and client empathy. By the end of my internships, I felt not only technically prepared but also equipped with the professional mindset required to thrive in dynamic, collaborative environments.

Chapter 4: The Evolution Into a Full Stack Developer

From Knowledge to Mastery

With internships behind me, my focus shifted to consolidating my skills and building independent projects. I joined TechHold Developers in January 2024 as a Full Stack Developer, a role that demanded integration of all I had learned—front-end frameworks, backend development, databases, and deployment practices.

I developed end-to-end web applications using React and Vue on the front-end and Node.js with Express on the backend. My responsibilities included integrating secure payment systems like M-PESA, implementing authentication mechanisms using JWT and OAuth, and ensuring the applications followed the MVC architecture. Each project reinforced the importance of writing clean, maintainable, and scalable code.

Refining Technical and Soft Skills

Working alongside UI/UX designers and project managers in Agile sprint cycles strengthened my collaborative abilities. I learned that the success of an application was not measured solely by its technical excellence but by the user experience, accessibility, and performance. I applied caching, indexing, and server optimization techniques to enhance performance, while ensuring that clients' SEO and online visibility were improved.

This period solidified my identity as a Full Stack Developer: someone who bridges the gap between front-end creativity and backend logic, combining technical expertise with user-focused design. The iterative process of design, implementation, testing, and deployment became second nature, and I developed a keen appreciation for the balance between perfection and practicality in real-world software development.

Lessons Learned and Growth

Chapters 3 and 4 represent the period in my life where curiosity, education, and discipline converged with real-world experience. I learned to navigate complex problems, communicate effectively with clients and colleagues, and manage multiple responsibilities under tight deadlines. More importantly, I internalized the principle that learning never stops—the world of technology evolves constantly, and a true developer thrives by staying curious, adaptable, and committed to continuous improvement.

This journey laid the foundation for my professional ambitions, inspiring me to pursue entrepreneurship, innovation, and meaningful contributions to the tech ecosystem. It is here, in the trenches of internships and full-stack development, that I discovered not just what I could build, but who I am as a professional and as a problem solver.

Chapter 5: Aspirations and Vision for the Future

Personal Ambitions

Above all, I aspire to cultivate deeper wisdom—rooted not just in intellectual curiosity but in lived experiences that highlight discernment and emotional intelligence. Wisdom, to me, is the ability to look beyond immediate appearances, anticipate long-term consequences, and act with balanced judgment. Socially, I aim to navigate relationships more effectively, empathize with others, and build genuine connections.

Central to these aspirations is strengthening family bonds. Family is the foundation of my identity, and as I grow, I increasingly value nurturing these relationships through meaningful conversations, support for each other's goals, and honoring shared traditions.

Professional Ambitions

Building a Tech Startup

One of my greatest ambitions is to establish and grow a tech startup—not just to succeed commercially, but to become a hub of innovation and social impact. I envision a company that develops solutions addressing real-world challenges in African communities, harnessing local talent, and contributing to economic growth.

This vision is tangible. I am inspired by transforming an idea from concept to functioning product, building teams, attracting visionary partners, and guiding a startup toward industry prominence. My ultimate goal is to rival established tech leaders while remaining grounded in ethical principles and social purpose.

Commitment to Continuous Growth

Continuous improvement is central to my professional ethos. Every client interaction, project, and piece of feedback is an opportunity to sharpen my skills—technically and professionally.

My goals include:

- Deepening expertise in software architecture, data security, and scalable systems.
- Refining communication with clients to anticipate and exceed expectations.
- Embracing feedback as a catalyst for growth.
- Staying updated with global tech trends to maintain relevance and competitiveness.

I aspire to be recognized not only as a skilled developer but as a trusted professional, sought-after partner, and respected colleague.

Impact and Contribution

For me, success is measured not only by personal achievements but by lasting, positive impact. The greatest fulfillment comes from knowing my work has improved lives, empowered organizations, and benefited communities. Every project that solves a real problem, every positive client testimonial, reinforces my passion for using technology as a force for good.

I aim to be an innovator whose work extends beyond financial success—creating solutions that educate, connect, and enable people across all levels of society. My goal is to provide opportunities for others, just as mentors and role models have supported me.

Long-Term Vision

Looking ahead, I envision a future where personal and collective ambitions align. I aim to build not just a sustainable business, but an ecosystem of opportunity: mentoring youth, fostering entrepreneurship, supporting community programs, and setting standards of technical and ethical excellence.

I want to pioneer accessible, affordable, and impactful products and services, addressing challenges in education, healthcare, business optimization, and digital inclusion. Success, in my view, will be measured by:

- The number of lives improved.

- Opportunities created for underrepresented groups in technology.
- A reputation built on reliability, excellence, and social responsibility.

Ultimately, I hope to leave a legacy: a transformed tech landscape, stronger communities, and a path for others to follow, proving that, though challenging, such a journey is achievable.