

### **Personal Statement.**

After the KCSE results were announced in February 2015, I was lucky to be amongst the top 2 students in Kigumo sub county in Murang'a county. This achievement accorded me an opportunity to join the Equity Leaders Program, which is run by Equity Bank Kenya. During the program, I was given an opportunity to intern at the bank as a teller. When I started working, I had no much exposure to internet frauds, considering that it was barely less than a year when I saw my first computer. I was tasked with running the bank MPESA desk and I was responsible for all MPESA transactions that happened in Equity Bank Kenol Branch. One day while working, I received a call from Carol, as she had introduced herself, who purported to be calling from Safaricom MPESA department. Carol gave me some instructions, which I followed naively. When the five minutes call ended, I realized I had transferred Ksh 69,899 to an unknown MPESA account. This prompted me to call the operations manager who angrily showed his disappointment for my naivety which had made me be a victim of fraud. The manager insisted that I needed to pay back the money and I was barred from going to work for a week until I had figured out a plan on how to pay back the bank's money. A week later, I paid back the money using my entire savings and got into debts in order to meet my basic needs. I learnt from this experience that I was vulnerable online and the only way out was through improving my digital knowledge.

A week after reporting back to work, my mother informed me that she and her friends had fallen victims to MPESA fraud. My mother is a small scale farmer and losing the money was painful to her. The same week, five bank customers were also forced to take bank loans to finance their businesses as they had been previously scammed via phishing emails. My mother was digitally illiterate and the five customers confessed that they had little digital knowledge. It now became clear to me that many people who didn't have enough digital knowledge were often victims of internet frauds and were vulnerable online. Realizing this, I was inspired to start sharing the digital knowledge I was learning with customers whom I interacted with at the bank. This was to try to equip them with digital knowledge.

Throughout my internship, I interacted with numerous technologies that powered banking operations. However, every time I came across a technology, I was scared to fall victim to another fraud. Nevertheless, I was curious about how these technologies were developed and created. I began to develop an interest in creation of more secure technologies. Thus, I joined the University of Cape Town in South Africa to study computer science, with an aim to improve my digital knowledge and acquire skills that could help me develop systems which were more secure.

In the course of my undergraduate studies, I have been involved in projects promoting digital literacy in communities. For instance, in 2018 my friends and I started Unimentors, to help underprivileged students in Cape Town acquire digital skills, considering that many failed to apply to university due to lack of digital skills. Further, in 2018 I led a team of students to organize and train informal market traders on digital marketing skills to help them attract traffic

to their markets. Due to my efforts on promoting digital literacy in communities, I was awarded the prestigious Entelect Social Responsiveness Award from the University of Cape Town.

In 2018, many youths in my locality were victims of online employment frauds where they were asked to pay some money in the promise of employment. Others were victims of online multi level marketing schemes. This prompted me to contact the local youth leaders whom we collectively organized a training program to help young people identify online scams and how to avoid them. During the training, many youths narrated horrific ordeals in the hands of scammers, which showed clearly that cybersecurity awareness was highly needed. One year after the training, some of them contacted me and narrated how the training helped them to avoid being victims of such online frauds.

During my study-abroad experience in Germany, January 2019, I realized that the country had low cases of online frauds. Researching on why that was the case, I realized that the country had good and strict cyber security policies which forced technology providers to follow strict requirements before their technology could be consumed by the public. Furthermore, the country had invested a lot in cybersecurity capacity building as more than 80% of the country's population was cyber security literate and thus low cases of online fraud. From this experience, I realized that implementing good national cybersecurity strategies could help protect citizens from online frauds. This experience inspired me to continue promoting digital literacy but also prompted me to start researching on cybersecurity capacity building initiatives being implemented in sub-saharan African.

It is through my research I came across The Global Cyber Security Capacity Centre (GCSCC) which is a centre established in University of Oxford to research on efficient and effective cybersecurity capacity building. The centre has also created the Cybersecurity Capacity Maturity Model for Nations (CMM) to measure a country's cybersecurity capacity maturity, which aims to enable nations to implement better national cybersecurity strategies. I was able to go through the CMM and realized that many sub-saharan countries continue to live under the cyber security poverty line. It is through this realization, I am inspired to join Oxford Cyber to pursue an Msc in Cyber Security to research on various cyber-security capacity building initiatives and how CMM can be deployed in sub-saharan Africa to help these countries become cyber mature. The course will also equip me with skills necessary to create sustainable cybersecurity awareness programs which I aspire to carry out in my community.