## HUMANSOF YearBeyond

## From Repairing Broken Computers to Building Innovative Solutions:

YeBo Alum, Melikhaya Mzola's finds his passion in YearBeyond Libraries Programme

YearBeyond alumni Melikhaya Mzola has dreamed about making a future in ICT since he was ten years old. As a young boy who looked up to his father, he hoped to follow in his footsteps and work with electronics. It was only fitting that receiving a computer from his father would be one of his biggest motivators, catapulting his journey into Computer Science and ICT.

Being a self-described curious mind and innovator, Melikhaya found himself doing too much with computers, often doing more harm than good, explaining, "I kept pressing and going into places that you're not supposed to go to. So, I ruined that computer about a year and a half or so after."

He fondly remembers standing next to his father while he opened the broken computer, attempting to fix the damage and being shown how it works from the inside.



From that moment, he nurtured this dream, shifting from playing with Microsoft Paint to focusing on how computers work and eventually becoming a software and systems enthusiast. For him, the next logical step was to acquire more knowledge about this passion by furthering his studies in Computer Science at the University of Free State.

Unfortunately, like many students in South Africa, financial circumstances can limit the ability to go to the finish line when pursuing higher education goals. When the same fate fell on Melikhaya, it was up to his determination to continue working towards his dream.

A regular day scrolling through social media sparked his interest as an opportunity presented itself through a post about the YearBeyond Libraries Programme. For an ICT Champion, the programme includes assisting library goers with computer facilities, applications, and government processes, amongst other ICT-related needs. YeBoneers (what the youth on the programme are called) in the programme also help promote and share knowledge with the community by facilitating information sessions and workshops; positioning libraries as an exciting skills and information hub that the whole community can benefit from.

In May 2022, he started what he describes as an amazing journey forming his "confident professional self."



## "I want to be an innovator. I want to work with other developers, developing software programs that can make life great..."

Reflecting on the experiences and lessons he programme, learned in the Melikhaya acknowledges feeling like a role model in his community because of the programme. Being a YeBoneer in a smaller community, he felt visible, inspiring more youth to enquire about joining. Giving hope to him and other unemployed youth is just one of the ways the programme has brought about a transformation community. During his time at the library, Melikhaya began to see ways in which the ICT champions could assist in transforming the library's day-to-day system.

At this point, the SITA Library Information Management System (SLIMS) was working at a slower capacity and creating frustration among staff, "they were getting frustrated because our library is reasonably huge. We have many books coming in, so the books that are being checked in were making the whole counter full", Melikhaya further described the experience.

Combining his passion for helping the community, ICT, and becoming an innovator, Melikhaya began taking steps to remedy the issue by creating a short-term intervention solution. Starting with a survey, he conducted research among the library community, investigating what the staff needed to make their experience better, without replacing SLIMS, but rather to use to assist when SLIMS is slow or down. Approaching his contacts in ICT, he collected advice and solutions for the persisting issue.

He compiled a plan to present to the Library Manager, Mr. William Clayton, who guided him and directed him on the right path. On the 15th of November, the situation became desperate when the system crashed and didn't show signs of returning after weeks of being offline. Based on the research and advice, Melikhaya and his team created an app that would assist in the interim with checking books in and out of the library. Regarding its other features, Melikhaya says that the app "can register new patrons, and it can also do reports on a monthly basis.



ICT enthusiast and aspiring programmer Melikhaya Mzola at a session during the YearBeyond conference in 2022.

The municipality and the provincial government want statistics of how many books were checked out to how many people." Amongst other functions, the app can also create a catalogue for the library and mark books informing staff which library a book was taken from, to eliminate a mixup where books are checked into the wrong library. Melikhaya speaks with pride, having accomplished a system that can give back to the team and his community, and hopes the app will get bigger one day. He hopes to see a future where the system can be adopted nationally as an official option for all libraries. Sharing where he sees the app in a few years and stated, "we need a little more authorization to implement more functionalities onto the system. So, now the sky's the limit with the system because, I mean, I have the expertise to build it as big as it needs to be."

Melikhaya's story is a testimony of the quote that "a dream delayed is not a dream denied,". Now as his contract at the library has been extended beyond the YearBeyond programme, he can continue building on this accomplishment, and be an innovator in his community.

Since becoming part of a programme that supported his abilities and allowed him to practice his skills, Melikhaya dreams of an opportunity to return to school and do more on a larger scale working for Microsoft or Amazon.

"I want to be an innovator. I want to work with other developers, developing software programs that can make life great... If I see a chance of me creating something that can make something easier for the people in their day-to-day lives... I'm going to create it."