BREAKING BARRIERS
30 AND UNDER: WOMEN IN STEM

As part of Africa Science Week–Kenya (ASW–Kenya) 2019, we are celebrating Kenyan women who are 30 and under, and breaking barriers as young, female, scientists. Our Breaking Barriers women are using science, technology, and innovation for socio-economic development and have already shown demonstrable success in their young careers. These six scientists are equally notable for their scientific and technical accomplishments as they are for the priority they place on mentorship and leadership.

MEET MAURINE CHEPKOECH
A cyber security researcher and mentor with international recognition as a woman in technology.

When Telecommunications Engineer Maurine Chepkoech aced her KCSE exam, her high school, Kipsigis Girls in Kericho County, gifted her a laptop. Her life was never the same. “By the time I completed High school, I had barely interacted with computers,” she remembers. “That laptop was a prized possession that I cherished. I explored every inch of it, marveling at all I had been missing”. Maurine’s excitement did not go unnoticed by her father, who promptly enrolled her into a local computer studies school. In 2018, Maurine would go on to receive the Vice-Chancellor’s Award and graduate with First-Class Honours in Telecommunication and Information Engineering from Jomo Kenyatta University of Agriculture and Technology (JKUAT).

Maurine now works as a cybersecurity researcher at eKRAAL, Kenya’s first cybersecurity innovation hub which provides services, guidance and advice on cybersecurity training and education to industry, academia, and other levels of government. Her work has contributed significantly to research on mobile security and reverse engineering. But outside of her work, Maurine has also invested time and resources into mentorship. In 2016 she was a Safaricom Technovation Challenge mentor and worked with girls from Loreto Convent High School to develop technological solutions that could offer advice and marketing services to farmers. Then, with the Kids Go Tech program, she helped introduce young children to the marvels of technology, and since March 2019, she has been a mentor with KamiLimu, a mentorship programme headed by Dr. Chao Mbogo, Head Of the Computer Science Department at Kenya Methodist University. Her appointment as a mentor at KamiLimu is especially meaningful, as she herself was a mentee of the programme in 2018. This progression is indicative of Maurine’s drive and steady ambition, which she credits in part to her family’s unwavering support in giving her the motivation to succeed.

“Memories of the efforts my parents and siblings put into my education are the driving forces behind every aspect of my career. They are the reason behind every single moment I have talked myself out of giving up on anything.” It is this quality of support that Maurine hopes to pay forward when it comes to other young people hoping to get into the field of technology.

Although she is only 24 years old, and a recent graduate, Maurine has already set up a mentorship programme of her own, Kuza, that is set to launch in January 2020 and will equip high schoolers in Kericho, her home county, with personal, professional, and Information and Communications Technology (ICT) skills to aid them in the transition to institutions of higher learning. Her ability to give back to the community where her love of computers was first birthed is no doubt rewarding, but it is also a foundational aspect of Maurine’s career.

When Maurine was the only Kenyan to be selected as a Google Women Tech-Makers scholar in 2018, she leveraged it into an even greater opportunity and secured support from Google for future community service initiatives. In 2020, she will work as a selected Mozilla Open Leader who will train and mentor participants on data security and digital footprints. She adds that there is also a chance for us to “foster security concepts, openness, and inclusion.” The Kenyans who she trains will be the next generation of cybersecurity experts in the country, she believes. While still young, Maurine’s career points to a path committed to helping other young people reach their highest potential.