

Interview with Misgina Gebretsadik

Computer Science student Mekelle Institute of Technology

GRACE: *tell us about your life and how you got interested in computer science*

Misgina Gebretsadik:

I was born in rural Ahzera 200km north the capital city of Mekele to farmer parents who lived in extreme poverty. From the age of four, I herded goats and cattle, fetching water from afar. Since school is a lottery system here, where not everyone can attend, I received a letter of admissions when I turned eight. A month earlier, I had lost my hearing to an infection that could have been remedied with access to a clinic and antibiotics. My parents, who had not been educated, believed a deaf person would not succeed in school. But my older brother, sensing my abilities, persuaded them to allow me to enroll. "How will he learn?" My mother questioned. "Just take him," assured my brother.

After meeting with teachers and demonstrating my ability to speak, lip-read, and exceptional eagerness to learn, I entered in Grade 1. Thrilled at the possibility of learning, I remained completely unaware of the lack of disability accommodations for me. Learning proved a largely solitary journey of attentively following the writing on the board, conversations, and spending hours with the books myself. There was no moment in which I received individual assistance. Despite all these challenges, and a three hour walk each way to school every day, I finished at the top of my class and my school, the only one to score 4.00 points in the Ethiopian Grade 10 National Examination in the history of our school.

American education transformed my world when I learned to code for the first time after high school. Selected by the Ethiopian Ministry of Education, I attended the non-profit coding camp, Addis Coder led by Dr. Timnit Gebru. Despite not even knowing how to turn a computer on/off, I tenaciously followed the lessons. Dr. Gebru kindly affirmed that I was on the right path to understanding and assured me I was an asset to the course. With her encouragement, I began to help others in class as well, which gave me a more solid understanding of the material.

GRACE: *What happened after Addis Coder and what are your hopes and plans?*

MG:

After Addis Coder, I qualified into a technology campus called Mekelle Institute of Technology where I am currently studying Information Technology Engineering. During the last three years of the Ethiopian civil war, my studies were disrupted, and I narrowly escaped open fire from both the Eritreans and our own soldiers, who were surprised I was deaf. Reflecting on my values and educational ambitions, I have decided I want to be a global leader to pursue my education further, work, and maybe study in the United States of Europe. Ultimately, I hope to advance my nation and the African continent. As a deaf person who is equally enthusiastic about engineering as language,

culture, and learning, I find Natural Language Processing (NLP) both intellectually captivating and socially promising for so many communities. I dream of building better NLP and AI technology that responsibly serves marginalized and disabled people with greater opportunities to learn. One area where I could personally contribute the most are the language datasets from under-resourced languages like my own Tigrinya. It would be a labor of love to gather Tigrayans to share their cultural and linguistic knowledge to build one of the first kinds of datasets, where native data laborers retain sovereignty over their data and are well-compensated for their cultural content, for vetting the dataset, and ensuring its quality and safety. With such a collective effort, Tigrayans could develop something like TigrayanGPT that could be used in education as well as industry, to provide opportunities for Tigrayans to improve their quality of life and well-being.