

## Interview with Dr. Anita Antwiwaa

### 1) Can you please describe your current professional position?

My name is Dr. Anita Antwiwaa. I am the Head of Department for Electronics and Communication Engineering at the <u>All Nations University Ghana</u> and the Head of Operations for All Nations University Space Systems Technology Laboratory-Ghana.

## 2) What do you do as part of your job?

My job entails ensuring regulatory compliance; collaborating with other senior management to formulate Space strategies; and overseeing the implementation of Space policies in our laboratory. As part of my job, I also promote Space and STEM education among the various primary and senior high schools across the country, and provide mentorship and motivation to the Space team to ensure they achieve anticipated outcomes with productivity and engagement.

Our Space and STEM education involves <u>CANSAT</u> training for the youth especially young girls and young women. We are currently working on Virtual Reality Industrial Tour and Learning to provide industrial and practical experience for students in areas where industries have closed their doors to them in the context of the Covid-19.

#### 3) What interested you to select your current professional path/career?

As a child, I grew up fascinated about Space and wanted to explore Space and what truly happens outside of our planet. Despite the progress being made by the African continent on its journey to Space, I knew becoming an astronaut would likely require much longer in terms of technological advances to become a reality. I still persevered with the dream and decided on a career path that brings my dream closest to being real - which is the reason why I decided to work on satellites and space related activities.

## 4) Can you tell us about your current activities promoting STEM education for girls in Ghana?

We are working on two ongoing projects. Firstly, CanSat is a tool for teaching Space to the youth, especially girls and young women nationwide. Despite Space and satellites being an abstraction in developing countries, this platform enables extensive teaching and learning experience to help students grasp the magnitude of such a field. The deployable CanSat provides an affordable opportunity for educators to acquire basic knowledge and experience in Satellite Engineering, considered as a cornerstone foundation of ICT. The CanSat Project and Training offers students a practical oriented training in the development of an educational



satellite. Students are required to conceptualize the mission, plan, design, build and test the educational satellite on the ground. After building it with a helium filled balloon, they deploy the satellite to the atmosphere in order to take pictures of the environment and record the weather information. ANU-SSTL Team uses this tool to sensitize youth to learn about Space Technology and its related activities, and to build capacity in this field. Currently, about 30 Senior Schools have benefited from it.

Our second project is the Virtual Reality Industrial Tour and learning for students. Since 2019, industries closed the doors for industrial tours to students due to the Covid-19 related pandemic and disruptions. This affected the students in the area of Industrial learning. ANU-SSTL decided to pursue Virtual Reality to give students industrial experience. ANU- SSTL visited some industries to capture their process involved in their operations, which is similar to what the students will experience when they visit the industry.

# 5) Would you have any suggestions for young women interested in seeking careers related to space?

My suggestion for young women interested in seeking careers related to space is that they should follow their dreams, set their minds to it and persevere, because everything in life is achievable. They have so many abilities in them which need to be explored, and the sky should always be their starting point. My recommendation on how to stay focused on the end goal is to surround yourself with like minded institutions and mentors that help motivate or encourage you to stay on track along the career path.

#### 6) Who are some of your role models?

Some of my role models include Stephanie Wilson, Mae Jemison and Shannon Walker.