

# Schedule

## REGISTRATION - 30 MIN (STARTS 9AM GMT)

## OPENING REMARKS - 10 MIN

Jemimah Kwakuyi, MC - 5 min

Prof. Reuben Y. Tamakloe (Physics Dept. KNUST):

Chairman - 5 min

Comment on online participants

## INTRODUCTORY TALKS - 90 MIN

Jake Yawson - All about Cansat Ghana - 15 min

Dr. Proven (GRAO) - Astronomy - 15 min

Ferdinand Sam - Space engineering - 15 min

Alberta Dadeboe - Intro to Electronics & Coding -  
15 min

Adams (Innovation Centre) - 3D printing - 15 min

Eric Obeng - Careers in IT etc - 15 min

## Q & A'S - 30 MIN (ONLINE & IN-PERSON)

Assessment forms for students

## OFFICIAL CANSAT GHANA 2023 LAUNCH

OFFICIAL STATEMENT ABOUT THE LAUNCH OF  
CANSAT GHANA 2023

## EXHIBITION BREAK/NETWORKING - 15 MIN

Launch an demo experimental satellite launch +  
balloon

## WORKSHOP

Eric Obeng, Erictronics

All participants

Elementary Campaign  
6 MAY 20 23 • KNUST

CANSAT

# Schedule

**PRIZE AWARDS GCRC - 10 MIN**

**CLOSING REMARKS & ANNOUNCEMENTS -  
20 MIN**

Jake Yawson - 3 min

Solomon Appekey - 3min

Eric Obeng, Erictronic - 3 min

Jemimah Kwakuyi, MC - 3 min

Chairman - 3 min

Elementary Campaign  
6 MAY 20 23 • KNUST



# CANSAT

# ELEMENTARY CAMPAIGN 2023

## WORKSHOP DETAILS

Lecture Outline (Prof - Eric Obeng)

- Introduction to computer programming?
- Why learn programming?
- Programming Myths
- Programming languages
- Machine Language
- Basic Programming terminologies

# ELEMENTARY CAMPAIGN 2023

## ANNOUNCEMENTS

- Upcoming CANSAT workshops
- XComics (Comic book about Space)
- XSpace Cubesats (building cubesats for Ghana)
- Everything Astronomy sessions

## ELEMENTARY CAMPAIGN 2023

### **PARTICIPATING SCHOOLS**

Afua Kobi Ampem Girls' Senior High School,  
Methodist Technical Institute, Opoku Ware School,  
Stem Genius, Kumasi Girls SHS, Yaa Asantewaa  
Girls' SHS, BIG BOSS, NAVASCO, BOGISS,  
KONSEC, SANSEC, SANSEC TECH, BOLGA  
SHERIGU SEC, ZAMSE SEC TECH, OLL GIRLS  
and KANJARGA SEC.

ELEMENTARY CAMPAIGN 2023

MEDIA

JOY NEWS



ELEMENTARY CAMPAIGN 2023

Launch 2023

MC

Jemimah Kwakuyi

**THANK YOU**

We cannot thank all of you enough for joining us today on this remarkable journey. We would especially like to thank our sponsors for all their support.

ELEMENTARY CAMPAIGN 2023

# Speakers

## INTRO - SOLOMON APPEKEY

Solomon loves everything about Space and enjoys learning Astronomy. He is a Masters (Research) student at University of Leeds, UK, Founder of Xavier Space Solutions (a Space start-up in Ghana) & part of the CanSat Ghana organisers and promoters. Also, he is a Science and Astronomy communicator. When free, he loves watching the famous sitcom series, The Big Bang Theory and enjoys watching and playing football.



## ELEMENTARY CAMPAIGN 2023

### INTRO - PROF. REUBEN Y. TAMAKLOE

Professor Reuben Yao Tamakloe is an Associate Professor of Physics. He is the Head of the Department of Physics at KNUST. His research areas include Renewable Energy Resources, Hydrogen Fuel, Microbial Fuel cells and Automation. He is the Team Lead and Coordinator of the Solar Traffic Lights Team, responsible for developing and managing the Solar Traffic Lights on the KNUST Campus. His team is also responsible for developing automated timers used in the College of Science during Examinations. His interests include Taekwondo, and plays a key role in the Ashanti Regional Taekwondo. Prof. Tamakloe is a family man and enjoys mentoring students in STEM education.

# ELEMENTARY CAMPAIGN 2023

## INTRO - DR. EMMANUEL PROVEN-ADZRI

Dr. Emmanuel Proven-Adzri is an Astrophysicist at the Ghana Space Science and Technology Institute. His current research is focused on periodic methanol masers in star-forming regions. He completed a postdoc research with the University of Leeds in the UK in 2022, having worked on testing models of periodicity of methanol masers. He also completed his Ph.D. in Physics (Astronomy) from the University of Ghana (2019), having worked under the supervision of Prof. M.G. Hoare from the University of Leeds, UK. His Ph.D. studies focused on methanol masers, an astrophysical signpost from the regions where stars are being formed in faraway outer space. He had his MPhil in Computational Science and Engineering from the University of Ghana (2012) and a BSc in Physics from KNUST (2009). His research interests include methanol masers, star formation, galaxy evolution, radio telescope commissioning, and instrumentation, applications of high performance computing (HPC), big data, machine learning, computational science and engineering. He is the Manager of the Ghana Radio Astronomy Observatory (GRAO) which operates the 32-meter radio telescope, the second radio telescope in Africa, besides South Africa and the single largest radio telescope in Africa. GRAO is acting as a forerunner for African space hubs that bring together radio astronomy, satellite ground stations and data centre infrastructure on one site with people who have big data analytic skills to address key development challenges in Africa. He has led many research projects in astronomy and has more than 10 research publications to his credit.

# ELEMENTARY CAMPAIGN 2023

## INTRO - ERIC OBENG

Eric Obeng is the Founder and C.E.O of Erictronic Systems and TECHFoundation Africa. His vision is to champion the technology-independence of Africa through the development of relevant technologies to solve problems in Africa to make Africa a better place. He has over eight years of experience designing electronics systems and computer software. He loves to teach and has taught student science, Mathematics, computer software design, and electronics. He has mentored and continues to mentor the youth in these fields. Eric Obeng is a physicist by training. He is a graduate of the Kwame Nkrumah University of Science and Technology (K.N.U.S.T) Ghana. He holds a Bachelor's degree in Physics and a pending MPhil Degree in Solid State Physics. His love for technology made him spend time learning computer software development and electronics alongside his academic work. Eric Obeng has worked on many electronics and software projects. At the university, K.N.U.S.T, he championed the development of traffic control systems which have become a legacy project of the Physics department to date. "The technology-independence of Africa requires a collective effort." Through his TECHFoundation Africa foundation and PCB Africa platform, he trains the youth on how to develop electronics systems and computer software.

# ELEMENTARY CAMPAIGN 2023

## INTRO - JAKE KWAAYISI YAWSON

Jake Kwaayisi Yawson is an aerospace engineer with a passion for space education and innovation in Ghana. He holds a Bachelor's degree in Aerospace Engineering and a Master's degree in Project Management from Kwame Nkrumah University of Science and Technology. Jake is also involved in several exciting projects. Jake is a Space Ambassador for Ghana at Space Is For You, where he writes articles on space spinoffs and space-related activities in Ghana. He is also an active member of the Space Generation Advisory Council (SGAC) and has volunteered on the communication team of the AFSGW 2021 in Stellenbosch, South Africa. Jake contributed to a paper for the Small Satellites Project Group (SSPG) at the International Astronautical Congress 2022 in Paris. Through his work and involvement, Jake is helping to inspire and educate the next generation of space professionals in Ghana.

# ELEMENTARY CAMPAIGN 2023

## INTRO - FERDINAND SAM

Ferdinand Sam Comes from the Central Region. Has B.A in Geography and Rural Development from KNUST. Taught Geography at Ideal College, Bolgatanga SHS, and now Afua Kobi Ampem Girls' SHS. Also doubles as an Aerospace engineer with SokoAerial Robotics, Ghana Army and Afua Kobi Engineering Club. Serves as Logistics Coordinator for Cansat Ghana.

# ELEMENTARY CAMPAIGN 2023

## INTRO -ALBERTA OGBO DADEBOE

Alberta Ogbo Dadeboe is a teaching and research assistant at the Electrical and Electronic Engineering department of the Kwame Nkrumah University of Science and Technology.

She has an interest in specifically designing secure integrated circuits to improve support for AI, as well as contributing to real-world applications and advances in Space Robotics and Cyber Security.

Driven by the strong understanding need for advancement in space research in Africa, she joined CanSat Ghana to help inspire the interest for STEM and its applications in space-related projects, specifically through CanSat competitions, among the student community in Ghana.

# ELEMENTARY CAMPAIGN 2023

## INTRO - DANIEL ASANTE

He is an Aviation/Space Enthusiast. Currently studying Electrical/Electronics Engineering at the Regional Maritime University. Daniel participated in the first Ghana CanSat Rocketry Championship. He joined the Space Generation Advisory Council (SGAC) and participated in the 6th African Space Generation workshop in Morocco as a Ghanaian Delegate. He is also currently an active member of the Small Satellite and Diversity Gender Equality project groups in SGAC and is involved in various space projects and other satellite applications with X Space Solutions. He is fluent in English and Ukrainian.

# ELEMENTARY CAMPAIGN 2023

## INTRO -SELORM APPEKEY

Selorm is the office manager for the first Ghanaian Space start-up company Xavier Space Solutions. Also he is the social media manager and a Graphic designer. He is a Space enthusiast and enjoy listening to music.



## ELEMENTARY CAMPAIGN 2023

# Partners

### DETAILS

IAU's Office of Astronomy Development (OAD)

Xavier Space Solutions, Accra - Ghana

Erictronics, Kumasi - Ghana

KNUST Department of Physics, Kumasi - Ghana

KNUST Innovation Centre, Kumasi - Ghana

Academic City University College, Accra - Ghana

World CanSat Rocketry Consortium, Serbia/India

Committee for Space Programme Development -  
CSPD, Serbia

Geek Space Labs, India

ELEMENTARY CAMPAIGN 2023

*The Team*

CANSAT GHANA

Team Leader: Solomon Appekey

Project Coordinator: Jake Yawson

CanSat Technical Team: Eric Obeng & Alberta Dadeboe

Social Media and Content Developers: Selorm Appekey & Jemimah Kwakuyi

Project Promoter and Organiser: Kingsley Ahenkora-Duodu

Logistics Administrator: Ferdinand Sam

Schools Coordinator: Daniel Asante