



MBARARA UNIVERSITY OF SCIENCE AND TECHNOLOGY

CENTRE FOR INNOVATION & TECHNOLOGY
TRANSFER TRANSFER (CITT)

**INNOVATION SEED GRANT AWARDEES
2019 - 2022**

Stories of change

Turning our innovative ideas into commercially viable products

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Centre For Innovation & Technology Transfer (CITT)



Previous CITT Seed Grant Awardees



Cohort 1 - Financial Year 2019/2020

Bio-organic Products Innovation

The CITT seed grant enabled the construction of 15 cubic metre biodigester system to produce biogas and bioslurry and transfer this knowledge to youths and farmers for employability and farmer product value addition.

This technology helped over 160 farmers to improve agriculture productivity.

"We are grateful for the CITT seed support to enable hands on training for the youths and farmers" John Bosco Nkurunungi



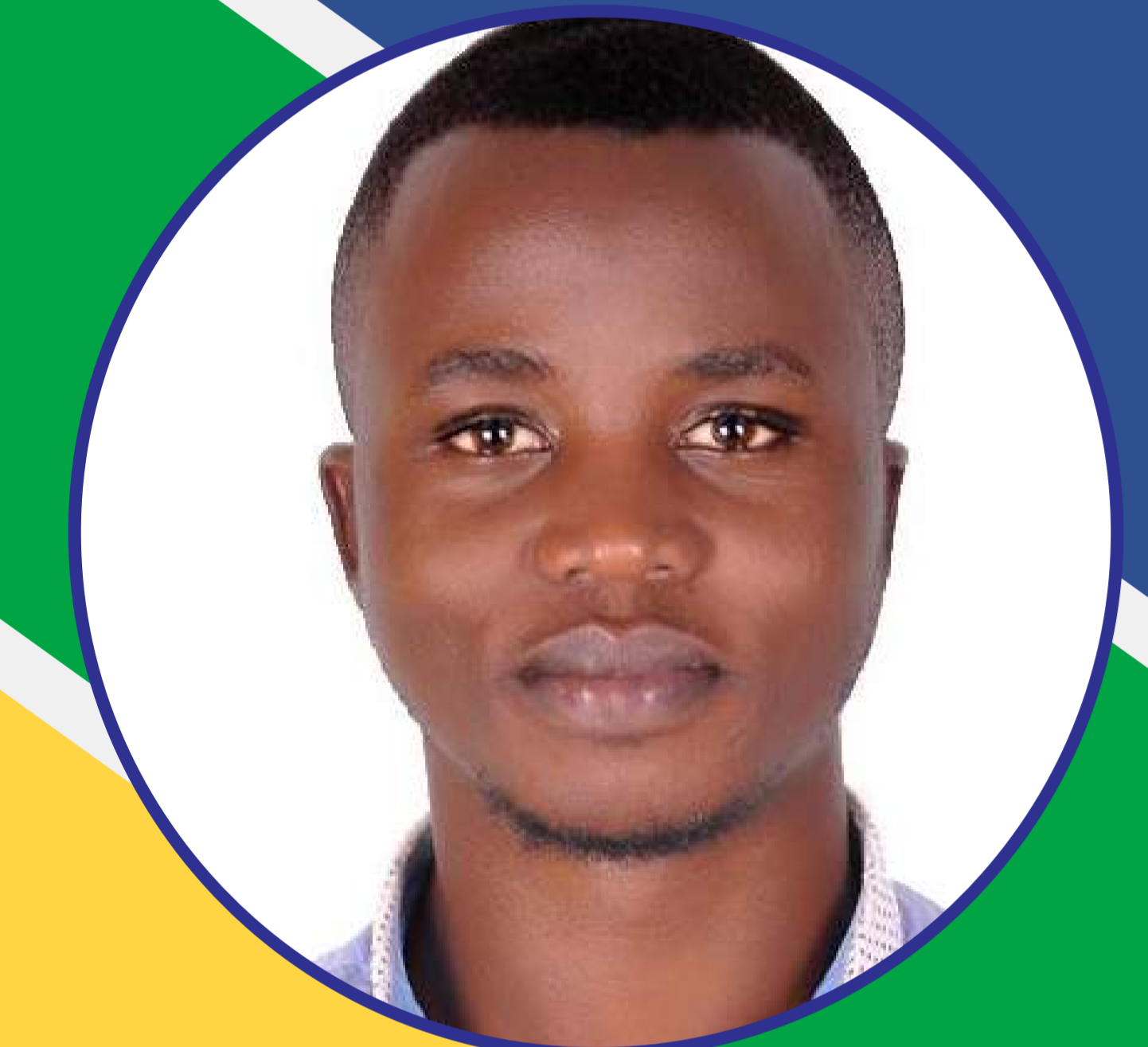
Dr. Nkurunungi John Bosco

Packaged Exam Monitor- A mobile Device to Track Examination Malpractice

This is a system-based device with a mobile application that automates the examination boxes to track and monitor the boxes in case they are tampered with before the right time.

The system sends alerts to the officials in charge examination's safety by showing the real time location of the boxes in case of any illegal opening attempt.

"Change is realized if we focused all our energy on developing the new, but not fighting the old, CITT has provided the enabling environment and platform to new innovators from which the team behind Packaged Exam Monitor (PEM) leveraged on" Jerome Ahumuza



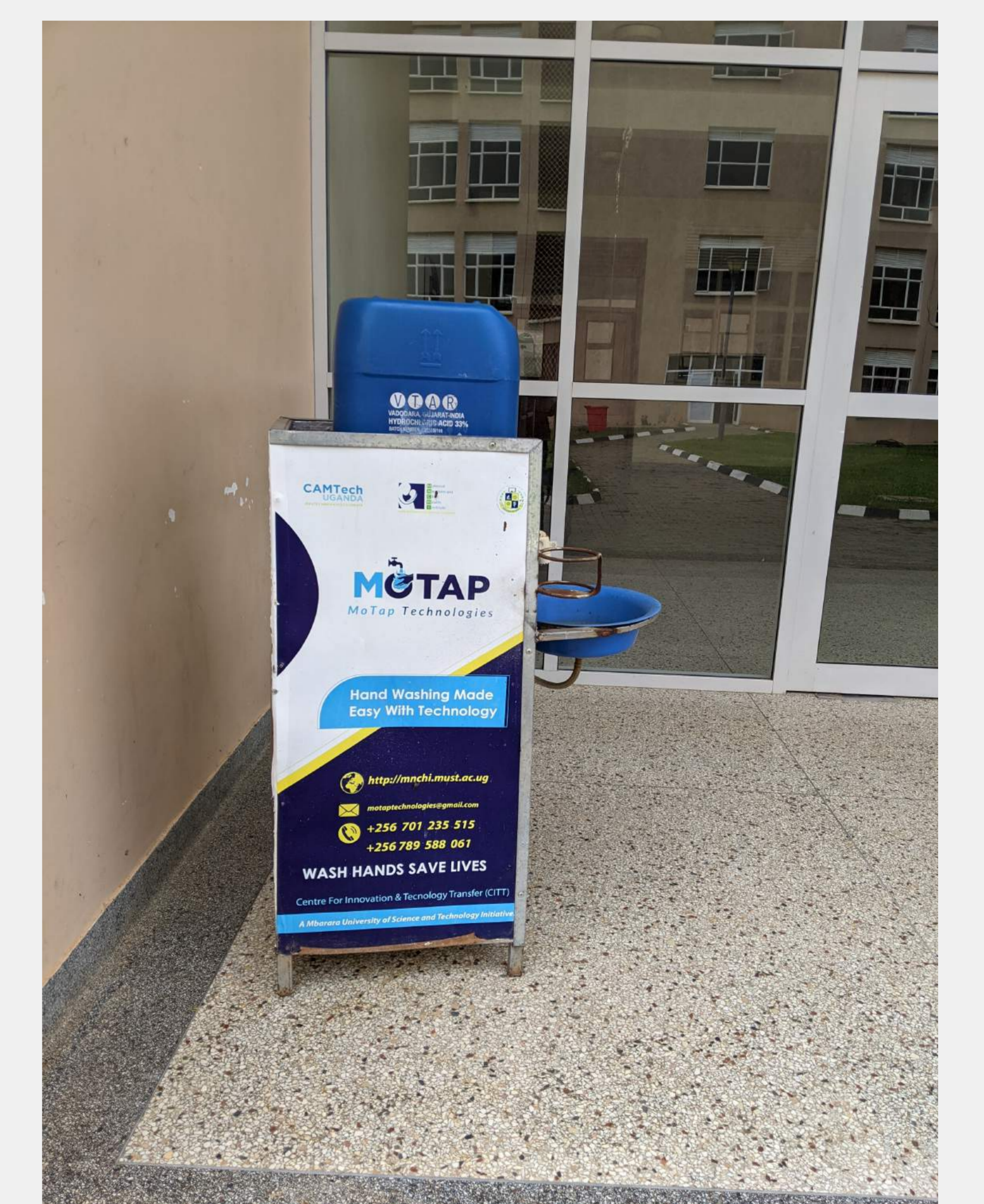
Jerome Ahumuza

MoTap- An Improved Tippy Tap for Primary Health Care

The MoTap innovation is an improved Tippy-tap meant to promote handwashing practice through technological innovations.

The innovation has been designed to ensure durability, flexibility, mobility and aesthetics. The CITT grant helped the team to realise their dream and break into the market with a commercially viable innovation that also helped in the fight against the spread of Covid 19.

So far 50 pieces have been sold to hospitals, DRGT, CAMTech, MGH among others at an average rate of UGX 120,000. More orders are being placed to beef up the market base.



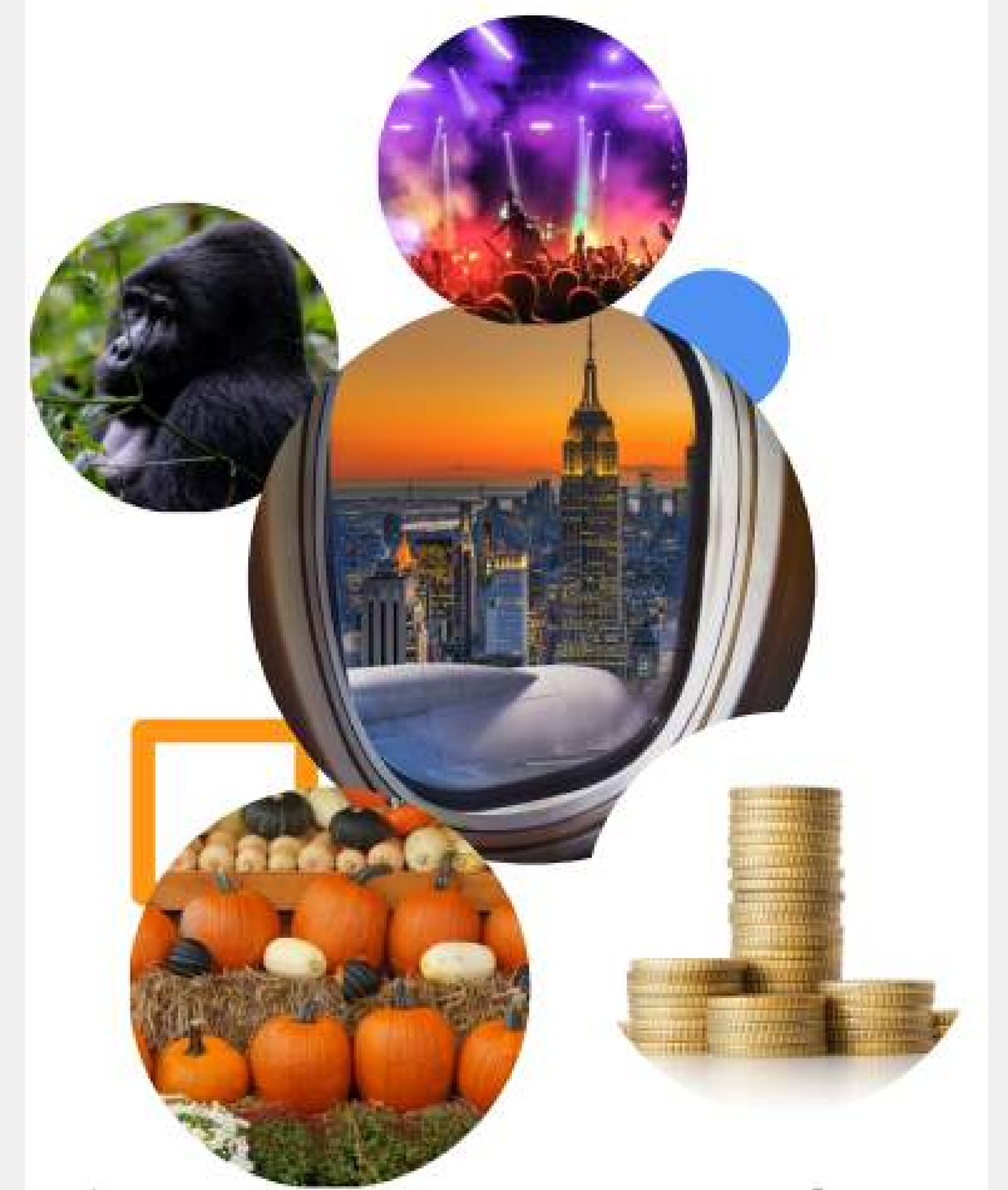
Dr. Tumuhimbise Manasseh

Cohort 2 - Financial Year 2020/2021



Ex-plre - A Tourism Platform for Travel and Exchanges

Ex-plre is an all one platform for travel and B2B exchanges across the African Continent, saving and partial payments for packages within the platform including our AI powered itinerary generator to enable tour companies develop and market their packages in and out of the application. The scheduled Ex-plre release is able to handle 2000 monthly active users (approximately 10,000 general users) who can communicate effectively with no or limited downtime, and host unlimited businesses and designations. Participating in the CITT Innovation Challenge was our groundbreaking move that enabled us register a spin-off company. The Foundational knowledge, grant and support helped us define our business model, understand our competitors, and find a viable value proposition to launch a good product in the market.



Natwijuka Isophel



CaPaFrex - Tropical Herbal Ointment for Skin Cancer

Without the grant, our ideas would still remain ideas. The grant was a great stimulus for our innovation and it would not have come to life. I am personally happy to see my dream come to reality.

IWe now have a labelled and branded product awaiting registration by NDA and will be ready for the market.

Product development has been a tremendously learning process that we carried out in both the MUST pharmaceutical laboratory and the Uganda Industrial Research Institute (UIRI).



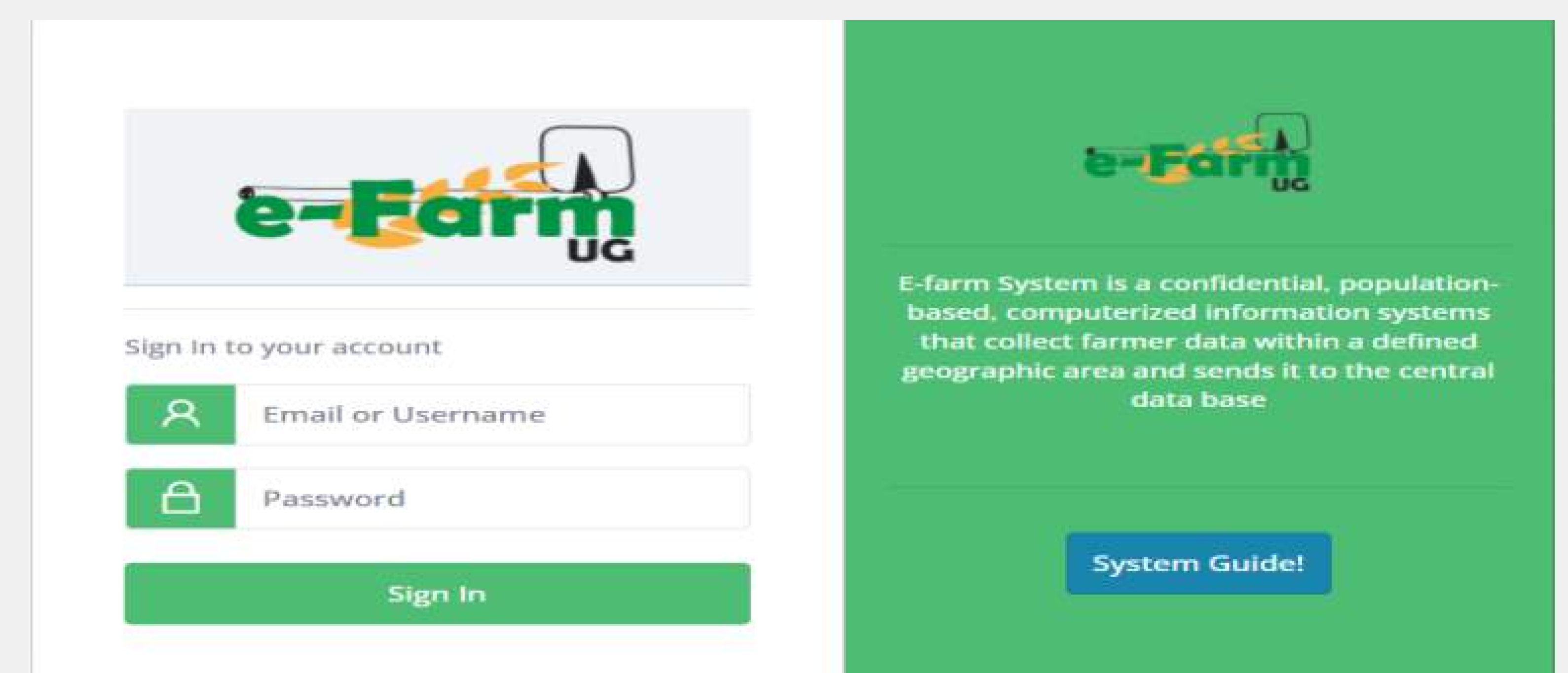
Lule Edrine Jonathan



e farm - A Computerized Information System for Farmers.

The Centre of Innovations and Technology Transfer has been of great support in our journey it has provided the requisite resources and strategic leadership. The team has been able to generate a high-tech prototype that is ready for commercialisation.

The e-Farm/e-SUTA is a population-based, computerized information system that collects farmer data within a defined geographic area which data is stored at a central database (e-cloud).



Tumuhimbise Manasseh

Cohort 3 - Financial Year 2021/2022

P2V Approach: Conversion of Plastic wastes to Fuel Oils

2022 CITT seed grant has enabled us to successfully design a locally made pyrolysis reactor to convert a nuisance of plastic waste into a valuable commodity (the fuel oil) in presence of a novel nano-catalyst, Nanopyroxene. We obtained the fuel oils and we are currently undertaking the laboratory stage of fuel characterization that will allow us obtain scientific data on the chemical nature and identity of the derived oils.

As a university lecturer and an undergraduate trainer, the CITT funds did not only facilitate this project but also eased my training sessions.



Muloogi Derick

Conversion of crop residues into nutritious livestock feeds

Agricultural production is the backbone of the Ugandan economy employing more than 70% of the population and contributing 25% of the national GDP. Returns from crop production are minimal defeating the investment intentions.

We are now undertaking laboratory tests in converting crop residues into animal feeds. The conversion of the crop residues into nutritious livestock feeds will make agricultural investment more profitable than it is today in Uganda. We will ever be grateful to CITT management and the seed support. This innovation is already bring smiles on livestock farmers.



Dr. Kintu Mugagga

HEBS Organic Natural Lip Balm

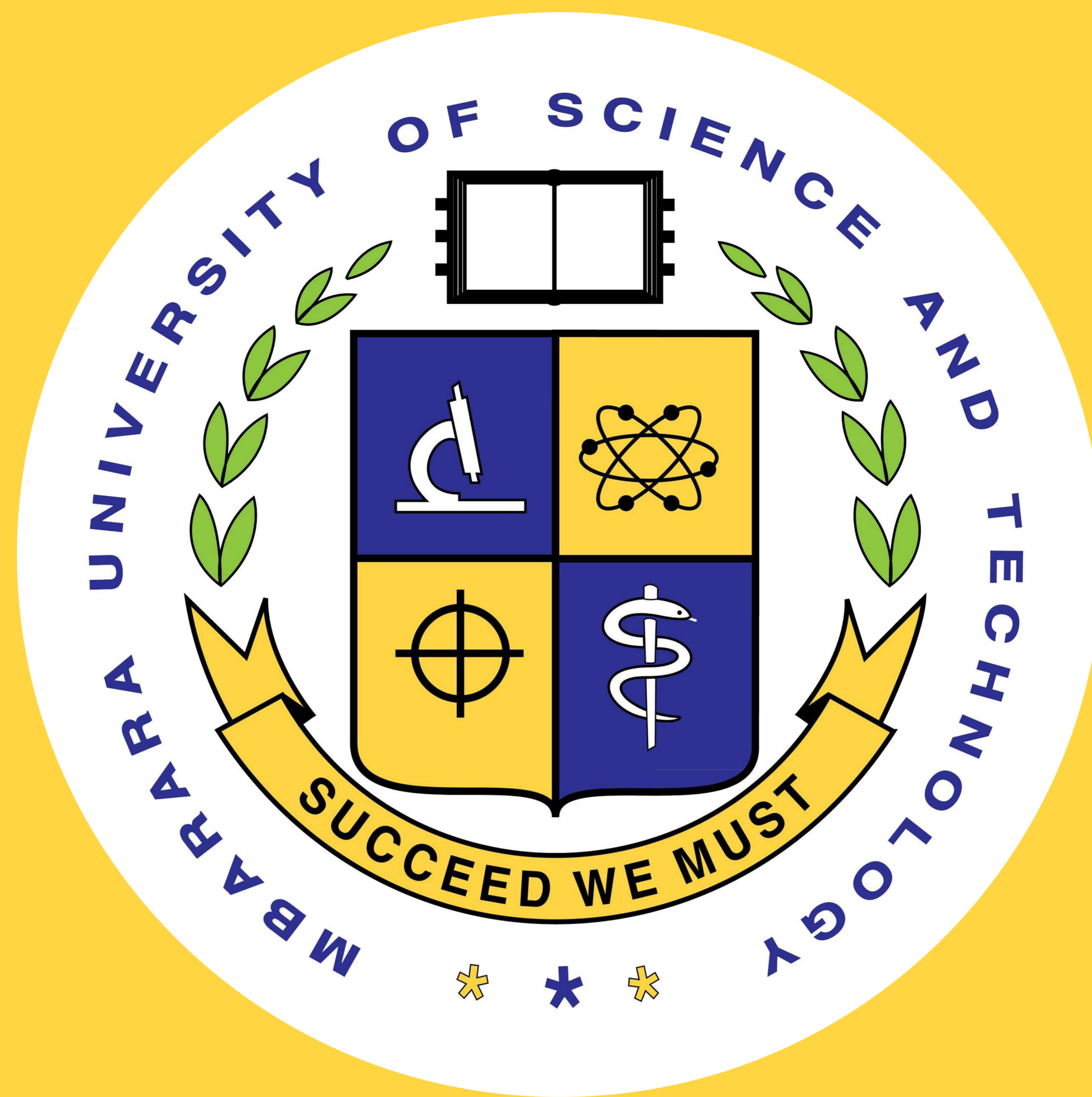
The seed grant has enabled us generate a natural lip balm product. The quality and appearance has greatly improved.

We were able to submit the product to UIRI for quality control tests. The funds have helped us incubate ideas and conduct more quality control tests.

The product is now on the market and is solving healthy problems of the community. We aim to provide about two hundred employment opportunities to the youth by 2025 and our vision is to improve health and appearance of the community using natural products.



Birungi Hellen



Centre For Innovation & Technology Transfer (CITT)

**New CITT Seed Grant Awardees under Research
and Innovation Fund - Government of Uganda
FY 2022/2023**

Cohort 4 - Quarter 1 FY 2022/2023

Pay Power Socket - An Flexible and Fair Pay Power System

This is a cost-effective access to prepaid power using users' mobile phones. The CITT scientific writing workshop was a great break through to organise their ideas. I integrated the knowledge I acquired from the CITT scientific writing workshop into my project, and that helped me to win two awards; the Best Year 2 Project Award from FCI-FAST, and the First Runner Up in the Renewable Energy Innovation Challenge organized by the Ministry of Energy and Mineral Development, National Renewable Energy Platform and Total Energies.

It is my humble appeal to every University student who has the passion for innovation to step forward and solve the challenges in your community, and that will set you apart from the crowd.



Johnbaptist Eshana Kauta

Golden Wine Residue - A Convenient Easily Accessed Good Quality Grape Pomace

My participation in the Scientific writing workshop organized by the CITT Management has not left me the same. The training added great value to my knowledge and skills in writing which I did not have before. Key topics such as getting a clear innovation problem statement, developing a business model canvas, competitive landscape analysis, team building and smart referencing using Mendeley were spot on with great facilitators.

The funding will help us transform winery residues into Grape pomace flour - a valuable product in making quality biscuits, bread, juices, human nutrition and livestock feed supplements.



Tumusingize Peregrino

PeinzyApp - A Financial Empowerment Platform

We aim to capitalize and leverage on the ever-growing mobile usage and internet penetration across rural areas to deliver a platform (an APP) capable of reaching these individuals and businesses. It will be a comprehensive multifunction B2B and B2C platform.

The Peinzy team is very grateful to CITT management who have provided scientific writing knowledge on two occasions and seed funding to meet most of our milestones.

We intend to use the money to build a sustainable APP to achieve its objective.



Dr. Rennie Bakashaba

Cohort 5 - Quarter 2 Phase One FY 2022/2023

Primitivus - An Early Stroke Detection Device

An Automated Self-Use Portable Device for Early Detection of Ischemic Stroke but studying the acoustic sounds of blood flow through the carotid artery.

CITT has elevated our ability to write scientifically and eloquently present our idea to even non-medics so that they feel our value proposition and we are grateful.

We will use our seed grant of UGX 6,000,000 to produce a high-level prototype the world cannot deny.

A device that will cut the global burden of stroke.



Kwagala Keith Richard

Crop Guard Organic Pesticide

Our team is committed to providing innovative sustainable organic farming solutions through a multidisciplinary lens. CITT has supported us in our innovation journey through mentorship and capacity building in organizational skills, writing skills and teamwork building thus we are well equipped to solve day-to-day challenges.

With the support from CITT, our team shall develop a highly effective, environmental friendly and sustainable organic pesticide supported by a series of research activities, production and stakeholder engagement. We believe crop guard organic pesticide shall be the best alternative to minimize the use of synthetic pesticides that are toxic to humans and our environment, create employment to fellow youths and improve farmers livelihoods.

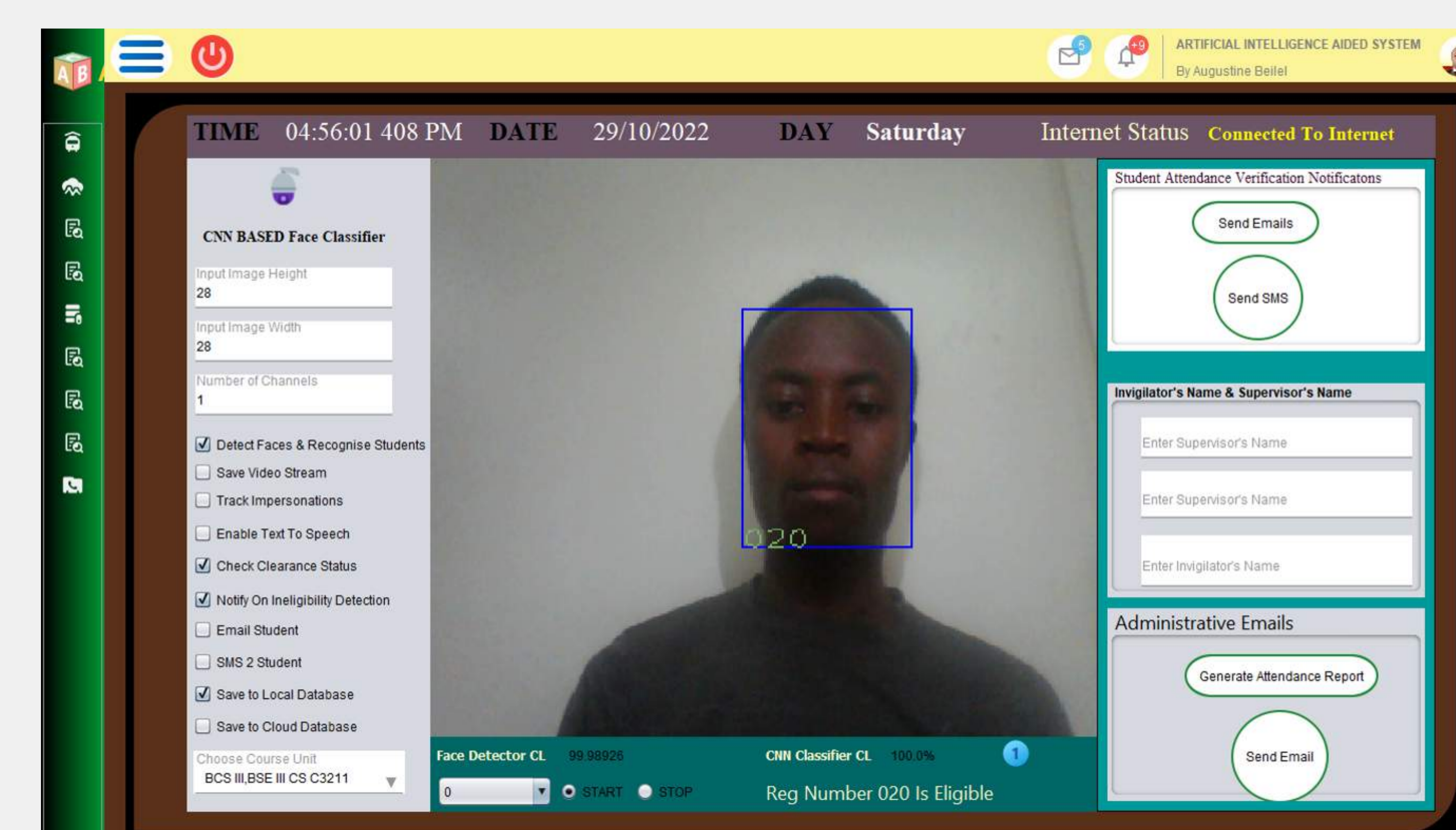


Nemeyimana James

TrackSmart - A Convolutional Neural Network to Detect Examination Malpractices

This innovation is an Examination Management system (EMS) that uses convolutional neural network, SMTP, and SMS to verify students, register attendances and share information.

We are very grateful to CITT for moving our idea from grass to grace. The Centre has provided valuable resources for us to carry out our project that otherwise we would not have been able to.



Augustine Beilel