Peter Cosmas Ngimbwa

P. O. Box 35091

Dar es Salaam, Tanzania

Telephone: <u>+255717664456</u> Email: <u>pngimbwa6@gmail.com</u>

Skype: pngimbwa

Marital status: Married. PERSONAL PROFILE

Nationality: Tanzanian.

Date of birth: February 12th, 1989

I am expert in website development (Django framework); computer and GIS programming (Python and JavaScript); database design/programming (PostgreSQL); R programming; machine learning and computer vision (deep learning); and machine learning libraries such as TensorFlow and Keras. I have experience working on Google Cloud Platform, Google Earth Engine and Linux environment. I have experience working with Arduino and Nvidia developer Kits such as Jetson Nano and Jetson Xavier NX and Nvidia Transfer Learning Toolkit (TLT) models.

I have good listening and communication skills. I work well in a team but also on my own, as I like to set myself goals, which I always achieve. I have a creative mind and am always up for new challenges. I am well organized and always plan ahead to make sure I manage my time well.

ACADEMIC QUALIFICATIONS

University: The Ohio State University – Columbus, Ohio USA.

Dates attended: 2014-2016.

Qualifications gained: Masters of Science in Food, Agricultural and Biological Engineering.

Grade (GPA): 3.9 out of 4.0

University: University of Dar es salaam-Dar es salaam, Tanzania.

Dates attended: 2009-2013.

Qualifications gained: B.Sc. in Computer Engineering and Information Technology.

Grade (GPA): 4.1 out of 5.0

School: Mzumbe Secondary School – Morogoro, Tanzania.

Dates attended: 2007-2009.

Qualifications gained: Advanced Certificate of Secondary Education Examination (ACSEE).

Grade: Passed (Division 1 point 5).

School: Msolwa Secondary School - Morogoro, Tanzania.

Dates attended: 2003-2006.

Qualifications gained: Certificate of Secondary Education Examination (CSEE).

Grade: Passed (Division 1 point 12).

PROFESSIONAL QUALIFICATIONS

CISCO CERTIFIED NETWORK ASSOCIATE (CCNA) ROUTING AND SWITCHNG: Certificate

Verification No: 418054598536HMAF

GRADUATE RESEARCH PROJECT

IRRIGATION DECISION SUPPORT TOOL (IDST):

I developed a system using Python to assist farmers on choosing appropriate irrigation method based on field condition, such as temperature, rainfall and soil.

Research objectives were to: (i) improve water management; (ii) improve irrigation design and (iii) improve crop production.

Thesis: http://rave.ohiolink.edu/etdc/view?acc_num=osu1461171005

UNDERGRADUATE PROJECT

POPULATION CENSUS AND PEOPLE RESIDENCE MANAGEMENT SYSTEM:

I developed a system that keeps records of people in Tanzania-wards. The system allows easy retrieving and transferring of one's particulars in case he/she decided to moves from one place to another.

Research objectives were to (i) create a system that keeps people's records and (ii) help the government to plan developments based on number of people in wards.

CAREER HISTORY

Current Job: Assistant Lecturer.

Organization: University of Dar es Salaam.

Website: http://udsm.ac.tz

Responsibility: Carries out lectures, seminars, tutorials and practical for undergraduate programs; Sets, invigilates and marks undergraduate examinations; Assists senior staff in lectures, seminars, tutorials, and practical for postgraduate programs; Supervises projects and practical training for undergraduate students; Conducts research and publishes results; Carries out consultancy and public service; Participates in relevant workshops and conferences; and undergo postgraduate training to PhD level.

Duration: From December 1, 2017 to present.

Previous Job: Database Management Officer.

Organization: National Carbon Monitoring Centre (NCMC) - Sokoine University of Agriculture.

Website: http://www.ncmc.suanet.ac.tz

Responsibility: Responsible for managing, organizing, and storage of carbon data in national forest inventory

system.

Duration: From January 1, 2017 to November 30, 2017.

DEVELOPED SYSTEMS.

- ➤ I have developed a database management system using Python for International Water Management Institute (IWMI) to store farmer's information, and collect and analyze field data. Tool functionalities were: to register farmers; enter/edit/delete farmer's field data; download data from the system for analysis.
- ➤ I have developed a database management system using Python for National Carbon Monitoring Center (NCMC) to allow people with and without programming skills to access/download NAFORMA data very easily

WORKSHOPS AND TRAININGS.

(A) SERA-46 Land Grant University Hypoxia Workshop.

Location: 33 East Nationwide Blvd Columbus, OH 43215 USA.

Dates attended: May 18 to May 29, 2015.

Purpose: To learn how to effectively implement science-based approaches to nutrient management/ conservation

that reduces nutrient losses in the environment.

(B) The Ohio State University Farm Science Review.

Location: 135 Ohio 38, London, OH 3140 USA.

Dates attended: September 15-18, 2014.

Purpose: To learn: principles of precision farming; how to use subsurface drainage to remove excess water on a farm field; how to use Google glasses to record plant condition; how to operate John Deere planters, combines and crop harvesters; how drones are used to survey farm fields and record information.

(C) Remote sensing training.

Location, NIBIO, Høgskoleveien 8, NO-1431 Ås, Norway.

Dates attended: June 19-28, 2017.

Purpose: To learn: estimating accuracy and area, and quantify uncertainty using stratified estimation; introduction to Germany satellite (The Tandem-X mission); introduction to Synthetic Aperture Radar (SAR); introduction to Interferometric Synthetic-aperture radar (InSAR); introduction to drone (i.e. how to fly it, how it collects images, software used to process images).

REFERENCES

Name: Dr. Arnold Towo Name: Prof. Siza D. Tumbo

Organization: University of Dar es Salaam Organization: Tanzania Ministry of Agriculture

Address: P. O. Box 35091 Dar es Salaam Address: P. O. Box 2182 Dodoma Telephone: +255769834590 Telephone: +255232604433

Email: towoarn@gmail.com
Email: siza.tumbo@gmail.com

Job title: Head of Agricultural Engineering Department
Job title: Deputy Permanent Secretary

Name: Dr. Jonathan D Witter
Organization: The Ohio State University
Address: 1889 Garrison Dr. Columbus,

OH, 44691, USA

Telephone: +16142926538. Email: Witter.7@osu.edu

Job title: Research Assistant Professor

DECLARATION

I, Peter Cosmas Ngimbwa, the undersigned, certify that the given information is complete and true to the best level of my knowledge and concern.

Signature: Peter Cosmas Ngimbwa.