

# Ernest Ruzindana

Date of birth: 19/05/1995

Nationality: Rwandan

Gender: Male

#### **CONTACT**

KN 2 Ave 250 Kigali, Rwanda (Home)

Nyarugenge Pension Plaza,
KN 3 Rd, Kigali, Basement 2
250 Kigali, Rwanda (Work)

erneruz@gmail.com

(+250) 783486141

www.linkedin.com/in/ernestruzindana-7481b8183/

https://twitter.com/ ruzindanaernes5

erneruz90@outlook.com (Sky pe)

#### **ABOUT ME**

Experienced land use planning professional with over 5 years of experience. Excellent reputation in solving problems and improving community satisfaction using geospatial technology, particularly GIS and remote sensing. Dedicated GIS developer with expertise in the use of python libraries such as GDAL, Pyproj, Geopandas for intelligent mapping and geospatial data science. A full stack web developer using the python django, nodem JS frameworks for backend development; JS and web related frameworks such as React and Bootstrap for frontend development and hosting the projects on various servers, including AWS Amazon. An enthusiastic professional eager to contribute to team success with hard work, attention to detail and excellent organizational skills.

#### **EDUCATION AND TRAINING**

06/01/2020 - CURRENT - Kigali, Rwanda

# MSc in Geo-Information Sciences for Environment and Sustainable Development

University of Rwanda

The program accumulates a wide range of courses related to geospatial technology to build an efficient environment and achieve sustainable development.

**Address** Kigali, Nyarugenge, KN 73 St, Kiyovu, Kigali, Rwanda, Kigali, Rwanda | **Website** www.ur.ac.rw

22/09/2014 - 02/11/2018 - Kigali, Rwanda

# BSc (Hons.) in Geography; Urban and Regional Planning.

University of Rwanda / College of Science and Technology

## **Major: Urban and Regional Planning**

(i) Research project for urban and regional planning; (ii) GIS for Urban and Regional Planning; (iii) Services and Infrastructure Planning; (iv) Principals for Remote Sensing; (v) Project Planning and Management; (vi) Urban and Regional Planning theory; (vii) Methods and Techniques of Urban Planning; (viii) Land and Housing; (ix) Land Administration; (x) Urban and Rural Spaces; (xi) Advanced Research Methods and Statistics.

#### Final-year dissertation:

Challenges Associated with Informal Settlement Upgrading in the City of Kigali. Case study of Agatare area. The research aimed to exam the challenges concerned with the upgrading of informal settlement and to assess the ways informal settlement upgrading was being implemented in Agatare area. This dissertation was awarded a grade of 77% (First Division).

**Address** Kigali, Nyarugenge, KN 73 St, Kiyovu, Kigali, Rwanda | **Websi** te www.ur.ac.rw | **Final grade** 3.9/5

26/04/2019 - Kigali

# Remote Sensing and Geospatial Training Certificate

Radiant Earth Foundation

Exploration of Radiant Earth Platform for acquiring Earth Imagery for Impact

Geospatial Fundamentals Skills using Remote Sensing, QGIS, ID editor, and  $\ensuremath{\mathsf{JOSM}}$ 

Address Kigali

29/03/2019 - Kigali

# **GIS Training Certificate**

University of Rwanda / Centre for Geographic Information Systems and Remote Sensing (CGIS)

Introduction to GIS,

Spatial Data Acquisition,

Working with Geodatabase,

Digitization using ArcGIS software,

GPS Data Collection and Integration in ArcMap,

Spatial Data Analysis,

Case Study - Application of GIS in Infrastructure, Agriculture, Health and Environment

Address Kigali | Website www.ur.ac.rw

21/07/2017 - Kampala

## State of the Map Africa Training Certificate

Humanitarian OpenStreetMap Team (HOT), OSM, Youthmappers

It was a four days training where mappers, programmers, developers, practitioners, entrepreneurs, and policy makers shared their passion for OpenStreetMap. We have trained in GIS with open sources and open data, and we have also been learned how GIS contribute to solving the problem that the society face.

Address Kampala

## **WORK EXPERIENCE**

01/02/2022 - CURRENT - Kigali, Rwanda

## Rural Land Use Planning Specialist

National Land Authority

- 1. Ensure the revision, dissemination and implementation of the National Land Use and Development Master Plan (NLUDMP).
- 2. Developing and updating District Land Use Plans including rural areas and ensure their compliance with the National Land Use and Development Master Plan (NLUDMP).
- 3. Ensure the elaboration and development of rural development plans, rural zoning regulations and their alignments with NLUDMP.
- 4. Ensure the alignment of rural settlement plans and rural investment projects with NLUDMP.
- 5. Developing land use thematic maps and reports.
- 6. Ensure dissemination of land use plans and updating rural land use information in the Land administration information system and other platforms.
- 7. Monitor the implementation of the rural land use plans and projects.
- 8. Ensure proper storage of GIS information related to rural land use plans and related regular updates.
- 9. Prepare regular reports on all field activities and ensure their timely delivery to the relevant authorities.

#### **04/10/2021 - CURRENT** - Kigali, Rwanda

## **Managing Director**

Geospatial Development and Research Hub

- 1. I developed a web portal to host the generated geospatial data and to support publications. This platform also accumulates all the information related to the Hub and records the story map, services and activities in the project.
- 2. Coordinating mapping and research activities in the team.
- 3. Organizing GIS training and preparing associated materials
- 4. To help the Hub provide the community with a full range of geographic information systems (GIS) and technology-based environmental solutions.

**01/02/2021 - 31/01/2022** - Kigali, Rwanda

## **Rural Physical Planner**

## National Land Authority

- 1. Development of the National Land Use Master Plan, District Land Use Plan Clusters and detailed physical plans.
- 2. Stay current on zoning, plot serving and building codes as well as environmental regulations.
- 3. Prepare site layouts as well as land subdivision plans for industrial, residential, tourism, commercial and mixed use development
- 4. Prepare planning studies and varied technical information to assist Land Use Review Procedure.
- 5. Prepare design guidelines for open spaces, buildings, project review and site planning
- 6. Administer government plans or policies affecting land use
- 7. Involve in site plan as well as design review of development solicitations responses
- 8. Develop massive plans and urban regional design concepts
- 9. Participate to develop conceptual master plan with construction documents review developed by professional consultants.

#### 09/07/2017 - CURRENT

## **Chapter President**

## Rwanda Youth Mappers Chapter

- 1. I organize various mapping events and projects, as well as surveying activities for data collection.
- 2. I contribute to various mapping and surveying activities using OSM technology to achieve our goals of mapping remote areas to help government and NGOs provide services to vulnerable communities.
- 3. As a section coordinator, I have gained leadership experience in shaping the spirit of the team.
- 4. Organizing trainings, mapathons.
- 5. Striving to ensure that the team grows and gets the will of the members to implement their projects.

Address Kigali

## **06/01/2020 - 29/01/2021** - Kigali, Rwanda

## **Rural Settlement Planning Engineer**

#### **Rwanda Housing Authority**

- 1. Coordinated different social and Affordable Housing Development programs in rural areas;
- 2. Support the local entities in the different programs and projects related to informal resettlement, site infrastructure servicing and restructuring;
- 3. Contribute to the technical content and activities involved in feasibility studies related to housing development promotion;
- 4. Support the establishment of human resettlement programs and Projects in specific sites of rural and per urban areas throughout country;

### **09/01/2019 - 27/12/2019** - Kigali, Rwanda

## **GIS Expert**

## CGIS / University of Rwanda

- 1. Leading the mapping team of the LAFREC (Landscape Approach to Forest Restoration and Conservation) project to rehabilitate the Gishwati-Mukura landscape using a landscape approach to better manage forest ecosystems and develop multiple benefits.
- 2. Assist lecturers in teaching GIS to university students and other GIS users.
- 3. To organize training in GIS technology and prepare the training materials required.
- 4. Mapping of Rwandan genocide memorials and massacre sites

#### Address Kigali

#### 01/06/2018 - 28/12/2018

#### Research Assistant

#### MeshPower Ltd.

Specifically, I was hired by MeshPower limited as an Assistant Surveyor and from this placement, I helped lead the effort to administer a household survey designed to assess the impact of micro-grid system upgrades on household outcomes such as income.

#### 01/01/2018 - 26/04/2018

#### **Local Team Leader**

Bitwise Development (PTY) LTD

I was contracted as a Local Team Leader by Bitwise Development (PTY) LTD with its WhereIsMyTransport project in the process of mapping and analyzing the transportation system in Kigali city and the associated independent service providers. During this time, I underwent project specific Team Lead training and I was responsible for training Data Collectors on the Collector App and contributing to the processing of the data. This process involved route planning, providing local knowledge and communication between Project Managers and Data Collectors.

Address Kigali

#### **ICT SKILLS**

## **Programming Skills**

- 1. Use of Python libraries such as GDAL, Pyproj, Fiona, Geopandas to generate intellectual mapping.
- 2. Web development with the use of React and Bootstrap frameworks for frontend customization along with HTML, CSS, JS.
- 3. Python Django and Nodem JS frameworks for Web backend and database development.

#### https://github.com/ErnestRuzindana

## **Technical Skills**

- 1. Proficiency in the use of MS Office, such as Word, Excel, Publisher and PPt.
- 2. Proficiency in the use of ArcGIS for Desktop, ArcGIS Pro, QGIS, JOSM, ID Editor in mapping.
- 3. Proficiency in the use of Adobe Illustrator, Adobe Photoshop in intellectual design

#### LANGUAGE SKILLS

MOTHER TONGUE(S): Kinyarwanda

**OTHER LANGUAGE(S):** 

**English** 

<b>Listening</b> C1	<b>Reading</b> C1	Spoken production B2	<b>Spoken</b> <b>interaction</b> B2	<b>Writing</b> C1
French				
<b>Listening</b> B2	<b>Reading</b> C1	Spoken production B2	<b>Spoken</b> interaction B2	<b>Writing</b> B2

#### **DRIVING LICENCE**

**Driving Licence:** B 06/06/2019 – 06/06/2029

#### **RECOMMENDATIONS**

#### **Protais MPAYIMANA**

**Division Manager** 

He is the Division Manager of Urban and Rural Planning at the National Land Authority and my supervisor in rural land use planning responsibilities. He has been my direct supervisor since we both worked at the Rwanda Housing Authority, where I served as a Rural Settlement Planning Engineer.

**Email** protais.mpayimana@rlma.rw | **Phone** (+250) 788658551

#### Alexis RUTAGENGWA

**Head of Department** 

He is the Head of the Land Use Management and Mapping Department at the National Land Authority and my second line supervisor for work related to land use planning and mapping.

**Email** <u>alexis.rutagengwa@rlma.rw</u> | **Phone** (+250) 788866479

# **Prof. Emmanuel Twarabamenye**

Senior Lecturer

Senior Lecturer and Full professor in the Department of Geography and Urban Planning at the University of Rwanda

Email <a href="mailto:twarabamenye@yahoo.com">twarabamenye@yahoo.com</a> | Phone (+250) 788856784

## Prof. Gaspard Rwanyiziri

Director of CGIS and Senior Lecturer

Director of CGIS (Centre for Geographic Information System and Remote Sensing), Senior Lecturer in Geography and Urban Planning (University of Rwanda)

**Email** grwanyiziri@gmail.com | **Phone** (+250) 788856784