# RUBIERE RAMIREZ

#### Geoinformatician

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## **SUMMARY**

A geoinformatician with over five years of experience in proprietary geographic information systems (GIS), free and open-source geographic information systems, spatial data programming, spatial database management, remote sensing, earth observation, and spatial data engineering.

#### **EXPERIENCE**

### Geographic Information System Assistant,

#### **Statistical Institute of Belize**

🖺 September 2022 - Present O Belmopan, Belize

Administer and maintain Enterprise GIS, spatial databases, services, and Web GIS applications.

- Administer and maintain spatial databases on PostgreSQL database with PostGIS extension.
- Administer and maintain web applications on free and open-source software for geospatial (FOSS4G): GeoServer & Mapstore2; and on commercial off-the-self (COTS) software: Portal for ArcGIS & ArcGIS Server.
- Create tools to automate and standardize the extraction, transformation and loading (ETL) of non-spatial data and spatial data into SIB's spatial data repositories.

#### Geographic Information System Technician,

#### **Statistical Institute of Belize**

**♥** Belmopan, Belize

Create spatial data using front-end geospatial software and produce maps.

- Perform Earth Observation Remote Sensing Techniques to detect changes in urban areas.
- Process aerial photos from drone imagery in QGIS and ArcGIS Pro.
- Automate the generation of spatial data with R programming language using OGC Standards.

#### Geographic Information Systems Technician,

#### **Coastal Zone Management Authority and Institute of Belize**

**♀**Belize City, Belize

Assist CZMAI with data creation and field data collection.

- Heads-up digitized and updated building footprints for Caye Caulker using Google Earth Pro and existing building footprints.
- Assisted with the collection of land use and building information in Caye Caulker using Open Data Kit for android devices.

#### **EDUCATION**

## **B.Sc. in Natural Resource Management**

**University of Belize** 

mathred 2012 - 2014

Pelmopan, Belize

## SKILLS

R | Python | ArcGIS Pro | QGIS | Data Engineering | Earth Observation and Remote Sensing | PostgreSQL | PostGIS | FOSS4G GeoServer | Geovisualization and Geocommunication with Web GIS.

#### **ACHIEVEMENTS**

# **Enterprise GIS in FOSS4G**

Developed and implemented an Enterprise Geographic Information System infrastructure exclusively with free and open-source software for geospatial: QGIS and PostgreSQL Database with PostGIS extension.

#### Web GIS in FOSS4G

Deployed and maintained Open-Source GeoServer and Mapstore2 with Apache Tomcat on Apache HTTP Server on SIB's GIS Servers.

# Web GIS Development: Full-**Stack PERN Application**

Built and maintained PostgreSQL, Express, React, Node.js geoportal to geovisualize the Statistical Institute of Belize's spatial data.

## **GIS Web Application for Census Progress Tracking**

Geovisualized census progress coverage by creating a web application using open standards: Mapstore2 web created using GeoServer, PostgreSQL database with PostGIS extension and ETL process automated with R programming.

# **Created {rvr2spatial}**

A package in R Programming to extract, transform, load data from MariaDB to PostgreSQL PostGIS.