# SULAIMAN O. MOSURO

### HONOURS AND AWARDS



## 🤝 ESRI SPECIAL ACHIEVEMENT IN GIS (SAG) AWARD 2011

(Environmental Systems Research Institute, Redlands, California, USA) Serving as principal **ArcGIS Server & Oracle DB Administrator** on Lagos Enterprise GIS



Surveyors Council of Nigeria (SURCON) (Professional Examination, 2013)

Registration as Surveyor: Best in Survey Laws, Regulations and Professional Practice

#### **EDUCATION**

#### SEPT 2011 – AUG. 2012 UNIVERSITY OF EDINBURGH

United Kingdom

### MSc Geographical Information Science

- Dissertation Research focus on Flood Modelling, flow hydraulics analysis, Infrastructure vulnerability studies, android mobile warning dissemination and event assessment, guiding urban planning, mitigation, response and relief strategy
- Modules include: Spatial Database Modelling (Oracle); Spatio-Temporal, Geostatistical and Cluster Analysis; Geovisualization; Object-Oriented Spatial Algorithms; Distributed GIS; Remote Sensing, Image Processing and Water Resource Management

2002 - 2007

#### **UNIVERSITY OF LAGOS**

Lagos, Nigeria

**B.Sc. Surveying and Geoinformatics Engineering**. (Second Class Upper Division)

### **SKILLS**

- Proficiency in GIS, CAD and Image Processing applications such as ArcGIS, AUTOCAD, Civil3D, Intergraph ImageStation for Photogrammetric Feature Collection, MapInfo, Geomedia, OrthoPro, Safe FME and ERDAS Imagine. Extensive GIS process automation skills using Python.
- Adeptness in programming on Java, Visual Basic, Visual Studio .NET and Python with specialty in applications automation and customization programming (including ArcObjects) and competence in mobile application development on the Android SDK
- Expert Database Administrator in Oracle (SQL Plus), Oracle Spatial, PostgreSQL and POSTGIS
- Competence in Web GIS application development using PHP, Perl, HTML, JavaScript, Angular, Node, jQuery, Bootstrap, CSS, SVG, Leaflet, Mapbox, GeoServer, GeoExt, OpenLayers, Google API, AspMap, ASP.NET and AJAX Technologies.
- Sound knowledge & experience in Surveying, GIS, Geo-Statistical Analysis and Spatial Modelling.
- Experienced in ArcGIS Server Administration, Onpoint, SDE, Oracle & SQL (Lagos Enterprise GIS)
- Survey data processing by Least Squares adjustment using Leica GeoOffice and Microsearch Geolab
- Strong analytical mind, enthusiastic to research, effective leadership, team & time management skills

#### WORK EXPERIENCE

# SEPT. 2012 – DATE Interspatial Technologies (Nig.) Ltd Lagos, Nigeria GIS PROJECT MANAGER / GEOMATICS SPECIALIST / R & D HEAD

- Project Management., Business Development, Lead Trainer, Research & Development Head. Engage in project sourcing, Technical & Financial Proposal & Report Writing, Presentation and client liaison.
- ArcGIS Server, Web GIS, SDE, Oracle and Enterprise Systems Management, Data Modelling & Architecture, SQL Data Mining, Open Source and Cloud-based Web GIS Development
- Land Information Process Change Implementation (Cadastral Reform), Spatially Enabled Electronic

- Property and Survey Document Management, Property Administration Lifecycle (Parcel Fabric Mgt.)
- Lead, supervise and direct field teams of as many as 50 survey crew members planning daily survey assignments and performing evaluation, data validation and quality control
- Leading and participating in all phases of the project life cycle from Scoping & Planning to Post-Implementation Support. Performing process documentation, reports and end-product delivery.
- Application programming to develop Enterprise GIS & Web-based Land Information Mgt Solutions.
- Planning and controlling budget and expenditures. Recruit, train and supervise staff.
- Responsible for Data Modelling, architecture, systems analysis, systems design, implementation, training and operational support on enterprise projects.
- Implementation of Location Intelligence and Geographic Business Analytics solutions
- Intervention Mapping, Inventory Management with web-GIS, Crystal Reporting integrating Maps

# MAR. 2008 – AUG. 2011 Interspatial Technologies (Nig.) Ltd Lagos, Nigeria GEOMATICS SPECIALIST

- Execution of the Lagos State Mapping Project / Enterprise GIS development (LAGIS)
- Responsible for the configuration and management of the Lagos Web GIS using ArcGIS Server, Oracle Database and Onpoint Front End. Preparing Routable Maps for Navigation System & devices
- Head of Team Cadastral Layer Preparation for the Lagos GIS. App Dev. for process Automation
- Processing of field collected data using Leica GeoOffice, Microseach Geolab or ArcPad Manager.
- Stereo Photogrammetric Digital Mapping, Aero Triangulation, Feature and DTM Collection, ETL to Geodatabase, Orthophoto generation and 3D Modelling using Intergraph ImageStation suite, Geomedia, MicroStation, FME, ArcGIS, Orthopro and 3D Workstations
- Survey Supervisor, Lead Instructor in Instrument Use for Precise GPS Survey & Total Station. Lead in Establishment and Harmonization of Geodetic Controls and Recertification Field Survey Projects.

# FEB. – MARCH 2008 Department of Petroleum Resources (DPR). Victoria Island, Lagos CONSULTANT GIS DEVELOPER (GIS PROGRAMMER)

- Customization of ArcGIS 9.2 for Automated Oil Map (Layout) Preparation, Exporting and Geodatabase Mgt. using VBA/VB6 with ArcObjects, Data interaction by PL/SQL procedures.
- Development of routines for interacting with Geodatabases, Shapefiles and attribute tables implementing SQL statement queries for criteria based Oil Map creation.

# MARCH – SEPT. 2006 Nigeria Airspace Management Agency NAMA Ikeja, Lagos, Nigeria INTERN CARTOGRAPHER (Industrial Training)

· Aeronautical charts creation and updating

AUGUST – OCT. 2005

Lands Bureau, Survey Directorate.

Land Information Systems Support Unit (LISSU).

Alausa, Lagos

### INTERN LIS ANALYST

- Drafting in AutoCAD, Layout Plans Digital conversion, Charting and field operations
- Use of GIS packages in Land Information Management

# PROJECTS AND ACTIVITIES

- Lagos State Digital Mapping, Geographic Information System (LAGIS) and Geodetic Control Harmonization Projects: LAGIS is a digital mapping project that involved aerial photography (7cm-Ground Sample Distance), LiDAR Survey (accurate to 10cm), digital mapping at 1:500 scale, geodatabase creation and an enterprise GIS development. I carried out geodetic survey missions (by GPS and levelling) & least squares adjustments, headed the team & coordinated preparation of the cadastral layer and partook in aerial survey missions. I also partook in feature extraction & geo-database creation and administered the Enterprise GIS.
- Office of Surveyor General of the Federation Enterprise GIS: The project involves data conversion of mapping data into geo-database as well as establishment of an enterprise Geographic Information System.

I prepared the required Data Model, Conceptual, Logical and Physical Design. Conducted Database Installation, Data ETL, Server GIS application configuration, Enterprise platform setup and Training

Illegal Extension of Properties / Land Encroachment Project: Direct responsibilities include: Training personnel on process of encroachment determination using legal survey & physical planning standards & specifications, training on AutoCAD Civil3D and ArcGIS tools; - Creation of scripts for demand notice generation and land charges determination; - Web GIS application and geo-database design for recording and presenting work progress; - Project reporting and client liaison. - Conduct of Environmental / Flood Modelling to exclude properties in flood plains from regularization

- Nigerian National Petroleum Corporation (NNPC) GRIP Project: The Gas Revolution Industrial Park Project for NNPC involved aerial photography, LiDAR survey, digital mapping, creation of geo-database and 3D modelling. I supervised field data collection, carried out data processing, client liaison and report writing.
- World Bank LMDGP Mapping of Interventions and Web GIS for M&E: Leading and participating in all phases of the construction intervention Monitoring and Evaluation (M&E) project life cycle from scoping & planning to data model design and system implementation being responsible for data modelling, model design, creation & data population, budget planning, field execution planning, data collection supervision, application configuration, crystal reporting module design and implementation, training and system support.
- United Nations Nigeria Cameroun Mixed Commission Boundary Delineation Project: Activities I carried out include satellite imagery analysis for photo-point identification and selection, reconnaissance, coordinating field geodetic survey operation for boundary pillars, Least squares adjustment of geodetic control data, spatial referencing of imagery, digital mensuration and training on geodetic data processing operation.
- Lagos electronic Survey and Land Occupancy Re-Certification (e-C of O) Project: Responsible for designing the work process outline. Researching the necessary component, requirements and specifications for e-Surveys, conducted site survey for verification of mapping data suitability in legal survey preparation, training personnel on process of legal plan creation using legal survey & physical planning standards & specifications, work process execution and training on using AutoCAD Civil3D and ArcGIS tools;
- Smart Mobile Field Data Collection in Nigeria, Niger and Mali for Spatial Networks Inc. USA: Coordinating project and overseeing implementation from inception to conclusion and delivery. Finding and Recruiting partners in foreign countries for work execution. Planning and controlling budget and expenditures. Performing evaluation, data validation, quality control, data delivery and client liaison

### SOLUTIONS AND PUBLICATIONS

- ENTERPRISE GIS APPLICATION DEVELOPMENT FOR LAND INFORMATION MANAGEMENT, CHARTING AND AUTOMATION OF LAND HOLDING STATUS REPORT GENERATION USING NODE, ANGULAR, PHP, JAVASCRIPT, ARCGIS ENTERPRISE AND CLOUD PLATFORMS
- CITYFIT URBAN GUIDE: MODELLING AND DEPLOYING INDICATORS OF PROPERTY EXPOSURE TO FLOODING IN LAGOS USING LIDAR DEM AND DSM DATA (Employing Surface Flow Modeling and Mobile Dynamic Dissemination of Animated Risk-Map Information) (Dissertation, 2012)
- WEB GIS APPLICATION FOR CONCESSION MAP AND OIL PROSPECTING DATA MANAGEMENT USING ARCGIS ONLINE, PORTAL & WEB APP BUILDER INTEGRATING MAPS, CHARTS, PICTURES AND REPORTING PLATFORM
- ANDROID MOBILE APPLICATION DEV. FOR DATA COLLECTION/INCIDENT REPORTING
- WEB MAP APPLICATION USING PERL, HTML, JAVASCRIPT, SVG AND ORACLE SPATIAL (2012)
- ROUTING WEB & MOBILE APPS TO CLOSEST FACILITY USING ASPMAP, ASP.NET, AJAX & JAVA
- APPS FOR SURVEY COMPUTATIONS, CAD & GIS AUTOMATION, ARCOBJECT SURFACE INTERPOLATION, LEAST SQUARES ADJ., DATABASE MGT E.T.C. USING VB6/VBA (2005-2008)

### CERTIFICATIONS AND TRAININGS

- LiDAR (Remote Sensing) Data Processing, PHB, Montreal Canada, 2013
- Registration as Surveyor (Professional Exam), Best Candidate Award, **SURCON Nigeria**, 2013
- Leica GeoOfiice and Geolab GPS Data processing, Tronnes Surveys Alberta Canada, 2010
- Stereo Map Compilation, Aero Triangulation & OrthoPhoto Certification, ROLTA Middle East,
   2010
- Onpoint Core Administration (Web GIS), ArcGIS Server with Onpoint ORION Canada, 2009