Nicolas Lopez
GIS Analyst

Summary

Years of Experience

<2

Office of Employment

Aberdeen

Industries

- Oil and Gas
- Renewable Energies
- Subsea Infrastructure
- Onshore Infrastructure
- Civil Engineering

Areas of Expertise

- GIS
- Remote Sensing
- Geoprocessing
- Lidar
- Map Algebra.
- Multi-Criteria Analysis
- Data-Analysis (Python and R).

Qualifications

Education

MSc (Commendation) in Geographical Information Systems and Remote Sensing – 2023

BSc (2.1) Zoology - 2022

French Baccalaureate – 2016

Software / Skills

- ESRI Technology (ArcGIS Pro, ArcMap), QGIS
- WebGIS (ArcGIS Online, Experience, HTML/CSS & Leaflet JS)
- Script Development (Python, R, SQL)
- Data integration platform FME (Safe software)
- Remote Sensing - imagery processing (ERDAS)

Professional Membership

- Royal Geographical Society Member

Languages

- English - Fluent
- French – Native

Experience

GIS Graduate Analyst

Wood plc (April 2024 – Present)

Nicolas, a recent Masters graduate in Geographic Information Systems, has specialised in geoprocessing, map algebra, and GIS programming. Since joining Wood, he developed a North-Sea Sustainability Web Map Portal to visualise open-source energy data in North-Sea and North-Western Europe, he optimised large dataset management using Python scripts (e.g. automation of acquisition and optimisation for use for the Web Map Portal of large public datasets -NSTA, Crown Estate-). He created optimised pipeline routes, borehole maps, and topographic maps for clients. He developed an array of data automation and data visualization scripts, handling raw survey data.

GIS Analyst

Wood plc

Blue Horizon (2024 - Ongoing) Geospatial analysis of environmental, geographical and physical constraints to support an onshore carbon dioxide pipeline routing feasibility study in a renewable energy project.

Creation and maintenance of GIS Web Services.

Data analysis and organising and structuring geospatial data.

Promoting the use of GIS and providing support spatial analysis for the Projects Department.

Python Scripting and tool development for geo-data analysis.

Support for creation of Routing maps and Routing Study Report.

Enagas – BarMar (2024 – ongoing) Geospatial analysis of environmental constraints to support an offshore hydrogen pipeline routing feasibility study in a renewable energy project.

Data analysis and organising and structuring geospatial data.

Python Scripting and tool development for geo-data analysis.

Routing report creation.

Promoting the use of GIS and providing support spatial analysis for the Subsea and Export Systems department.

Sakarya (2024 - Ongoing)

Geospatial analysis of raw survey MBES data to support pipeline routing and flow insurance on an oil field.

Python Scripting and tool development for geo-data analysis.

Oman Masterplan – (2024) Multi-Criteria Decision Analysis MCDA support and Geospatial analysis of environmental and commercial activity constraints to support wind, solar and hydrogen concessions creation in Oman.

Python Scripting and tool development for geo-data analysis.

SGN Caledonia & SGN Connect – (2024) Geospatial analysis of environmental and commercial activity constraints to support an onshore hydrogen pipeline route selection process and implementation of the Web GIS system.

Production of Routing Maps.

Centrica – RoughH2 – (2024) Geospatial analysis of environmental and physical constraints to support an offshore hydrogen pipeline routing feasibility study.

Data analysis and organising and structuring geospatial data, Design and drawing of maps

GNI – (2025) GIS Support of Geotechinal engineering with MBES survey data.

Absheron – (2025) GIS Support of Geotechinal engineering with MBES survey data.

Greater Sunrise – (2024) GIS Python tool development.

NEP Humber – (2024) GIS Python tool development.

Experience

MSc GIS (January 2023 – December 2023)

University Conservation Projects Geospatial analysis of environmental and ecological activity constraints to determine an area for wildlife conservation on behalf of the Estate of the University of Aberdeen. This area was determined using advanced Map Algebra, Multi-Criteria Analysis and Fuzzy Analysis.

Other University Projects Geospatial analysis of environmental and commercial constraints to support a railway route selection, dam site selection, a farm development project. These projects required geospatial analysis of Remote Sensing data (Satellite, LIDAR), geoprocessing and map algebra to determine criteria and constraints for site selection, and data organisation and advanced analysis using python scripts (from data acquisition calling to API to data uniformization from multiple sources to a unique analysable dataset).

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Professional History

- Wood plc (April 2024 – Present)
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