Jack Ingledew-Gale







Portfolio

Professional Experience:

GIS Officer and Database Manager at the South Atlantic Environmental Research Institute (07/2021 – Present):

- Geospatial Project Development and Support: Collaborated closely with the Falkland Islands
 Government on geospatial project development and support, enhancing strategic decision-making
 through advanced spatial data analysis and management.
- Remote Sensing and Earth Observation: Utilised advanced remote sensing techniques and machine learning for earth observation, including habitat classification, risk mapping, amplitude change detection and time-series analysis, providing critical insights into environmental monitoring and management.
- **Spatial Data Analysis:** Expertly conducted spatial data analysis using QGIS and automated workflows in Python, significantly improving project efficiency and data accuracy.
- Drone Photogrammetry and Surveys: Served as a commercial drone pilot, conducting scientific surveys and 3D model building for terrain analysis. Leveraged UAV drone photogrammetry, including the use of Agisoft Metashape Pro, to create accurate 3D models for a variety of environmental applications.
- Comprehensive Database Management: Spearheaded the management of databases using PostgreSQL and MS Access, ensuring high standards of data integrity and compliance with ISO 19115 geospatial metadata standards.
- WebGIS and Web Application Development: Led the design and implementation of WebGIS
 platforms for scientific and governmental projects using QGIS Server and Lizmap, alongside
 developing web applications using the Django framework, HTML, and CSS to facilitate user-friendly
 data visualisation and management.
- International Collaboration and Capacity Building: Actively engaged in UK Overseas Territory and international collaborations. Delivered GIS training and workshops, significantly enhancing GIS literacy and capabilities across partner organisations.

Operational Support and GIS Assistant at SUEZ Recycling and Recovery UK (04/2017 - 09/2020):

- Responsible for data collection, analysis (spatial statistics), manipulation and location intelligence for winning large municipal bids and existing contracts (£10m-£250m).
- Multi-criterial overlay analysis, webmapping, rurality & drive-time analysis.
- Delivering GIS training to the mobilisation and bid teams to improve overall knowledge of spatial analysis and its functionality, including creation of a QGIS user guide library.
- PostgreSQL Database creation and management.
- Automation of GIS workflows (Python)
- Webmapping + hosting (Leaflet, Ipyleaflet, Folium, AWS, Google Cloud)
- Webaspx/EasyRoute Pro software route modelling, scenario, and assumption testing.
- Bid writing and resourcing.

Project Officer at the Royal Agricultural University, UK (09/2014 – 12/2016):

- Successfully managed ~20 projects within timescale and to budget, ranging from £2k- £100k.
 Including areas such as international agriculture in developing countries, climate change adaptation, public sector infrastructure monitoring and evaluation, and community urban gardening.
- Competently managed multiple subcontractors and stakeholders to provide high quality reports to address the needs of the client or landowner.
- Bid writing, data analysis, and developing financial proposals in collaboration with leading academics.

Further Experience:

- Owner of MapsByJack (Etsy) 3D Data visualisation of raster data (2020 Present)
- Climate Change Risk Resilience Consultant at Climate Vision (as and when basis: 2012-Present).
- Consultant UN / Government report for the state of the coastal environment in Perú (2013).
- 6-Month Scientific Research Internship in Chilean Patagonia, Huinay Fundación (2012).

Education:

MSc. Climate Change Risk Management (Merit) - University of Exeter (2009-2010)

Core Themes: Risk Management, GIS, Applied Climate Dynamics, Flood Modelling, Themes in Climate Change, Historic Climate Change, Scientific Research Methods, Understanding & Communicating Climate Change Science.

BSc. (Hons) Geography with Earth System Science (2:1) - University of Exeter (2006-2009): Core Themes: Physical science, Climate Systems, Earth systems, Scientific methods, Geomorphology, GIS.

Other Skills and Awards:

- Linux, SQL, FME, Microsoft Office, ArcGIS, EasyRoute Pro, Adobe Lightroom, Blender, VirtualBox, ESA SNAP, Google Earth Pro, PgAdmin4
- General VLOS Specific Category Remote Pilot Licence (Flyer ID: GBR-RP-CSM96DDXHH5Y)
- Certified PRINCE2 project management: Practitioner, APM: Project Fundamentals
- Full, clean UK driving licence
- Spanish language working proficiency (C1 level)
- Certified English language teacher (TEFL)

Libraries and Frameworks:

GDAL/PDAL Rasterio
Pandas/GeoPandas Folium
Shapely Keplergl

Fiona Django/GeoDjango

Matplotlib