

Alexander Camilleri

GIS Developer



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English (C2 / Native) | German (A1)

--- Experience ---

GIS Team Leader and Geospatial Analyst

- -- 05/21 03/24 | RammSanderson Ecology Ltd, UK
- Automated workflows with Python, analysed location datasets, created dashboards, maps and data visualisations.
- Designed, built, refactored, and maintained a data transformation and analysis app with Visual Basic for Applications in OOP style.
- Developed an automated project management/ticket system using MS SharePoint, Office Scripts (TypeScript) and PowerAutomate.
- Responsible for team of 4-6. Led Python workshops for non-coder staff, created a series of technical training videos for QGIS software.

Joiner / Cabinet Maker

- -- 06/10 09/17 | Carrington's Architectural Joiner's Ltd, UK / Freelance, UK
- Worked as part of a team of craftsmen designing and constructing unique furniture. Focus on precision, accuracy, and high quality.
- Developed skills in improvisation, product-design, meeting tight deadlines, planning, resourcefulness, resilience and communication.

--- Education ---

PGDip Geographic Information Science (Est. Distinction)

- -- 09/21 07/24 | University of Leeds, UK
- Studied technical and computational aspects of geographic information science using QGIS, ArcGIS Pro, Python, SQL and JavaScript.
- Developed static and full-stack web maps with LAPPP (Linux, Apache, PHP and PostgreSQL with PostGIS extension).
- Programmed GUI-enabled Python apps in OOP style.
- Satellite image processing, remote sensing, statistical and spatial data analysis.

BSc Natural Sciences with Year in Industry (1st / GPA 4.0)

- -- 09/17 07-21 | University of Nottingham, UK
- Multi-disciplinary program. Studied computer modelling, spatial analysis, earth-systems science, biogeochemistry and ecology.
- Developed skills in "systems-thinking" and pattern-recognition, ability to break down complex systems into components.

--- Projects ---

Full-stack CRUD app with NodeJS, Express and PostgreSQL

- Web interface and server code to interact with a relational database located on a Raspberry Pi connected to the home network.
- Worked with 'express', 'body-parser' and 'pg' node modules. Gained understanding of full-stack infrastructure.

Full-stack "Fact-Share" web-app using NodeJS, React and Supabase

- Single page app to exercise retrieving data from an online relational database and displaying it with 'react'.

Species Record Assistant

- App built for RammSanderson Ecology Ltd with 2+ years in production. Designed, maintained, and upgraded as solo developer.
- Large VBA codebase originally written as "spaghetti-code" but extensively refactored in OOP style with classes and encapsulation.
- Applied the Model-View-Presenter pattern for a settings menu.
- Bespoke solution to convert UK grid references to XY coordinates in EPSG:27700 projection.
- Incorporates local file-writing and spatial analysis automation with the QGIS Python API 'PyQGIS' and GDAL processing functions.

GitHub Portfolio Website

- Mobile responsive website to train with native JavaScript and CSS Flexbox / Grid.

UK House Price Interactive Web-map

- Single page web-mapping app to analyse and visualise UK Government House Price Index data
- Worked with LeafletJS and the GeoJSON format. Optimised performance by reducing geometry vertex quantity.

--- Technical Skills & Qualities ---

- Prioritises clean, succinct, and readable code, primarily in JavaScript and Python, interested in good software design principles.
- Comfortable with Windows and Linux command-line interface (CLI) interaction and environment management (npm / pip / venv).
- Experience with Git and GitHub, experimented with Docker.
- $\hbox{-} Team player with high capacity for self-directed learning through documentation and asking appropriate questions.}\\$
- Genuine curiosity and enthusiasm for technology. Built and tinkered with computers since young age.
- Open to learning and sharing skills / knowledge.
- Unique background, brings valuable transferable skills and perspectives. Artistic nature with an eye for structure and design.