

Dafydd Pearson

Full Stack Geospatial Software Developer

Background & Profile

Highly motivated full stack software developer, with a passion for all things geospatial.

An effective communicator with strong organisational and problem-solving skills.

Passionate about mentoring and developing others, as well as building my own knowledge and experience.

Technical Skills

LANGUAGES - TypeScript & JavaScript, Python, SQL

FRONTEND - Angular, OpenLayers, Turf.js, Bootstrap, HTML, CSS,

BACKEND - Flask, SQLAlchemy, Express.js

DATABASES - PostgreSQL, PostGIS, DynamoDB

GEOSPATIAL - Geoserver, MapProxy, GeoPandas, GDAL, OGC APIs, QGIS

AWS - S3, EC2, EB, Lambda, SES, Boto3, CloudWatch

OTHER - Git & Github, Docker, Jira

Technical Education

TRAINEE SOFTWARE DEVELOPER (Apr 2019 - Aug 2019)
CodeClan, Glasgow, Scotland

CodeClan is an intensive 16-week Professional Software Development course following Agile principles, involving 800+ hours of coding. I completed numerous solo and group projects and developed a fundamental understanding of the following technologies and skills -

- **Languages** - Java, JavaScript, Ruby, SQL, HTML5, CSS3
- **Technologies** - Vue.js, React, MongoDB, PostgreSQL, Express.js, Node.js, Sinatra, Leaflet, Google Charts, Web APIs, Git & GitHub
- **Skills & Principles** - Test Driven Development, Agile Development, Full Stack Web Development, Object Oriented Programming, RESTful APIs, UX/UI Design, SOLID Principles

Work Experience

SENIOR DEVELOPER (Dec 2020 - Present)

DEVELOPER (Sept 2019 - Dec 2020)

thinkWhere, Stirling, Scotland

- Working as a full stack developer across a range of cloud native geospatial applications hosted on AWS. Primarily focused on thinkWhere's core product, groundMapper
- Develop new features - implementing both business logic in Python (Flask) on the backend, and frontend interfaces using TypeScript (Angular)
- Design, estimate, and refine new features and projects, based on high-level customer specifications
- Develop web GIS functionality using OpenLayers, TurfJS and TypeScript
- RESTful API design, documentation, and development using Flask, Python and Swagger
- Streamlining and automating processes for onboarding geospatial datasets
- Hands-on experience with industry standard geospatial tooling and middleware - Geoserver/GDAL/OGC APIs
- Resolving technical customer queries in a timely and professional manner
- Scrum Master for the team - planning sprints and managing workloads of internal team members as well as outsourced contractors
- Mentoring and onboarding new staff members - with the aim of building a cohesive and effective team which can deliver results
- Delivering technical presentations to customers and stakeholders, detailing our architecture and tech stack
- Assist in monitoring and maintaining AWS real estate, which is managed using infrastructure as code (Terraform)
- Responsible for coordinating and deploying new releases, using a combination of manual scripts and deployment pipelines

Qualifications

CODECLAN, GLASGOW

Level 8 SQA PDA, Software Development

2019

PENGLAIS COMPREHENSIVE SCHOOL, ABERYSTWYTH

A-Levels : Business (A), History (A), Mathematics (C)

2004 - 2006

CUSTOMER SERVICE ADVISOR (Feb 2017 - Apr 2019)

Santander, Glasgow, Scotland

- Coached and motivated new joiners - focusing on empowering them to develop the skills and knowledge that will allow them to succeed in the role
- Implemented new methods to measure and evaluate success, resulting in new joiners being empowered to develop themselves and our team being more accountable
- Delivered consolidation meetings, and developed new training material with a focus on making sessions interactive and engaging
- Effectively identified risk when developing new joiners, and worked with a team to implement a response
- First point of contact for customers - handling requests in a polite & professional manner, treating each customer as an individual and delivering a tailored response
- Consistently achieved KPIs and helped develop others to attain targets

OFFICE MANAGER (Jul 2013 - Aug 2015)

The Monster Bookshop, Llandre, Wales

- Managed a team of 7 employees - handling over 4,000 orders a week, as well as wholesale orders of secondhand books
- Developed lasting relationships with wholesale customers and was responsible for generating and handling international sales

References and full work history available upon request

Products & Projects

GROUNDMAPPER (thinkWhere)

[Angular](#) | [OpenLayers](#) | [Python](#) | [Flask](#) | [PostGIS](#) | [AWS](#)

groundMapper is a feature-rich web GIS for sharing, creating, and managing geospatial data. I designed and developed numerous features - including user permissions, categorised styling, and importing spatial data using GDAL. I was heavily involved in the re-development of the admin interface from a legacy C#/ASP.NET site to a modern Angular/Flask application hosted on AWS.

<https://www.groundmapper.com/>

OS MAP TILE TOOL (thinkWhere)

[AWS Lambda](#) | [AWS S3](#) | [AWS API Gateway](#) | [Python](#) | [PostGIS](#)

Sole developer on an internal tool facilitating the purchase of Ordnance Survey map tiles. Developed as both a practical tool as well as a proof of concept to explore how serverless functions could be implemented to link existing products and services.

WORLD QUIZ (CodeClan group project)

[JavaScript](#) | [Vue.js](#) | [Google Charts](#) | [MongoDB](#)

An educational full-stack game, with quizzes on flags, capitals, currencies and continents. Features include -

- A profile to track users' progress using charts and maps
- Fully explorable 3D globe implemented with WebGL Earth
- All questions, answers, and quiz topics are built dynamically

https://github.com/DafyddLlyr/World_Quiz

Contact

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GitHub

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