Claire Birnie

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Personal statement

I'm an experienced GIS consultant with a proven track record of delivering high quality mapping and data in both public and private sectors. I'm knowledgeable on sourcing and using Open Data from a variety of sources and built this into a PostGIS central data store platform in my current role. One of my biggest passions is creating content for non-experts for them to more easily interpret and understand complex or difficult to access data. I am a driven, passionate, results focused person with a comprehensive knowledge and understanding of the Geographical Information field, project workflows, technical solutions and team leadership. Most of my work and personal skills development is with Open Source software, I'm a passionate advocate of the Open Source movement. Outside of my full-time job I spend time delving into learning more advanced and efficient ways of producing quality data visualisation and increasing my knowledge of statistical methods, PostGIS server administration and programming languages.

Key Skills:

- Experience of multiple GIS software and data transformation packages (QGIS, FME, ArcGIS, MapInfo and related toolboxes)
- PostGIS, data management & SQL experience
- Stakeholder liaison, building solutions and automation
- Data analysis, interpretation and visualisation
- Extensive knowledge of Open Source data, sourcing information, interpretation and use
- Training and mentoring in GIS software and upskilling others
- Knowledge of Python, HTML, SQL, GRASS, SAGA and GDAL data manipulation tools

Employment History

GIS Contractor (6-month contract), ARUP

08/2019 – Present

Responsibilities

Working within the Digital Engineering Team across all disciplines on large civil engineering projects. Work includes data management, acquisition, data analysis and visualisation. Using ArcMap and FME to transform, combine and create workflows. Liaising with stakeholders across the ARUP+ teams, external GIS Teams and completing data analytics and mapping on changeable deadlines.

GIS Consultant, Pell Frischmann Consultants Ltd

03/2017 – 08/19

Responsibilities & Achievements

GIS lead across the business responsible for advocating and facilitating the increasing use of Geospatial data and technology across the company. Through my involvement in several high profile projects such as HS2 and Midland Metro Alliance (MMA) I have gained a reputation for producing high quality data and mapping outputs. Since joining Pell Frischmann I have built the company's use of GIS from a few scattered individuals without direction into focused teams harnessing GIS within their work streams using open source tools such as GDAL, GRASS and SAGA. I have developed and delivered training on GIS workflows and implemented best practice technical standards.

Key skills and achievements:

- Lead a team to develop digital mapping illustrating access constraints to a road system as part of the Midland Metro Alliance project using a combination of OS Open Roads, Open Rivers, OpenLayers, SQLite and OS VectorMap
- Implemented Social Deprivation Impacts (SDI) analysis to demonstrate the social and financial impact of changes to road networks for two separate local councils using Income Deprivation Scores from the ONS visualised using OS scale colour raster data combined with highways network data
- Developed strong working relationships with sub consultants by using my technical expertise to derive high quality, analysis-ready data sets from national flood risk data sources, often on very short deadlines
- Designed and implemented a data processing solution to obtain Open Source topographic LiDAR data, create 3D contours using QGIS and GDAL and then convert the data to dxf AutoCAD format enabling our team of transport engineers to complete drainage modelling that would not otherwise have been possible
- Repairing a failing client relationship and recovering a project at risk of being cancelled by maintaining frequent regular contact and producing agreed deliverables against extremely tight deadlines. I took a lead role in mediating discussions among key stakeholders to assign actions and subsequently managed these to a positive conclusion.

- Lead on Building Information Modelling (BIM) Level 2 projects for GIS compliance
- Continual self-development of skills and resources to automate and harness GDAL, GRASS and Python tools to improve workflows, data manipulation and management.
- Frequently involved in developing new project bids including scoping and budget estimates for time, resource and data requirements of GIS components and flood risk assessments.
- Developed standard templates company templates for project bids relating to GIS data analysis and visualisation, SDI analysis, flood risk assessments and environmental constraints mapping.

GIS Specialist & Flood Risk Officer, Environment Agency

06/2015 – 03/2017

Responsibilities & Achievements

Working in the Partnership & Strategic Overview team as a GIS mapping & data specialist. I produced quality bespoke visuals and data analysis for multiple projects both internally and externally. In addition to these duties I was also lead for training and skill building and created a medium to long term plan for core training as well as soft skills courses.

Key skills and achievements
- I produced the mapping and data analysis for the whole Humber Flood Risk Management Plan (FRMP) which you can find here: https://www.gov.uk/government/publications/humber-river-basin-district-flood-risk-management-plan.
- During my work on the Humber FRMP I worked with key stakeholders in the local council, the Environment Agency and the Lead Local Flood Authority to understand their need for clear, intuitive flood risk mapping.
- Developed an automated workflow using a combination of FME workstation and MapInfo to convert data provided by local councils to a format suitable for analysis using ArcGIS toolbox and model builder to generate standardised, reproducible output facilitating rapid turnaround through multiple iterations of the FRMP to meet the evolving requirements of the project stakeholders.
- Completed certification in Mastering ArcGIS 10.2.
- Completed core training for emergency response as part of my incident management role during the flooding of 2015/16 in hostile situations, lifejacket training and flood risk response.

Customer Service Administrator, Aviva

01/2007 - 07/2012

Responsibilities & Achievements

I held a number of roles across multiple business units and worked my way up from call handling and administration to a position of responsibility and authority.
- Business Continuity specialist for over 3 years implementing the business unit disaster recovery plan acting as the lead contact for third party area of the business and communicating recovery scenarios to senior management along with outside training packages.
- Procurement of resources from external parties and administration of the business unit for senior management.
- Website development for internal communications and training (HTML/CSS).
- Contact centre (inbound calls) aiding customers with accounts
- Communicating with customers both internal and external by phone, email and letters. Complaint/conflict management used throughout all role

Qualifications

PostGIS Administrator & User Training (Thinkwhere)

February 2019

GIS247 Accredited Training - Mastering ArcGIS 10.2 – Pass

2015

York University

2012 - 2015

Bsc (hons) Undergraduate degree (2:2)

Environmental Science

Professional Memberships

- Associate member of the Institute of Environmental Sciences (AMIEnvSc)
- Working towards chartership in CGeog, (GIS)
- Member of the Association for Geographic Information (AGI)
- Member of the British Cartographic Society