



Andrew Thompson: Profile

BA MSc DIC FRGS FBCartS

45, West Street, Croydon, CR0 1DJ

t: 02086817191 f: 02086813482 e: awthomp@aol.com

Website: www.groundworkmaps.com



SUMMARY:

- A GIS technical manager, geographer and cartographer since 1980, I have managed geospatial data and mapping projects for a wide variety of customers and clients including central government, UK military geographic intelligence, urban redevelopment corporations, and geographic information publishers.
- Recent work includes UK defence geographic intelligence databases; street network analysis for commercial web mapping applications; geotechnical mapping and analysis for utility infrastructure planning; geographic data collection, and cartography and the production of atlases for geographic information publishers.
- I typically work with the client and other specialists, liaising with interested stakeholders and responsible for defining strategy, geographic research, data management, analysis and presentation, and map production. I am an experienced user of a wide variety of commercial-off-the-shelf and open source GI tools.

QUALIFICATIONS:

Sheffield University

BA Hons. Geography and Geology

Imperial College London

MSc Engineering Geology and DIC

University College London

MSc Geographic Information Science

MEMBERSHIPS:

Fellow of the Royal Geographical Society 1992

Fellow of the British Cartographic Society 1998

Association for Geographic Information

British Geotechnical Association

International Society for Soil Mechanics and Geotechnical Engineering

Society of Cartographers

MY WORK:

- Geospatial intelligence projects, data collection, analysis and management; publishing and presentations.
- Web mapping and the development of geospatial databases to store and distribute spatial data using internet map servers; mash-ups on Google Earth; and 3D visualisations.
- Location, cost-path and accessibility analysis; noise and air pollution studies for legal limits and thresholds; and site investigations for structures like pipelines and tunnels.
- I have produced posters and graphics for brochures, publicity displays, reference atlases and reports; and technical plans for development design specifications and legal documents.

My London mapping won the British Cartographic Society's Design Award.



TYPICAL APPLICATIONS:

- Atlases, presentations and geographic information publishing
- Geographic database development and web mapping
- Development planning for urban regeneration projects
- Reference design for project development
- Data analysis for decision support for power-line route planning and risk assessment
- Environmental impact and engineering projects
- Identifying and defining property boundaries for legal documents
- Data models and interoperability, and spatial schemas

SKILLS-BASE:

- Geographic and geotechnical projects and data management since 1980
- Environmental analysis and mapping
- Urban redevelopment mapping (integration of building plans with imagery and historical data etc)
- Terrain Modelling (digital elevation models and viewsheds etc)
- OS Mastermap, LiDAR and imagery data management
- Field survey and data collection using gps and imagery
- Spatial data analysis and PPA
- Internet map servers and Google Earth/ Virtual Earth mash-ups
- 3D and VRML visualisations
- Spatial databases and SQL
- GI Systems: ArcGIS applications including ArcScene, Spatial Analyst, 3D Analyst; Geostatistical Analyst, and Publisher, and Manifold GIS
- Web mapping: GIS and GeoServer
- Cartography and map publishing

PROFESSIONAL INTERESTS:

I have been involved with the Digital National Framework (DNF), with the EU's INSPIRE project and various geographic research projects such as "Brownfield" mapping for NLUD, Visualisation and Mapping the Underworld, and Geospatial Web Services, and the use of open source solutions; and attend geographic information (AGI; ESRI and DGI) and cartographic conferences (BGS and SOC). I am a committee member of the AGI Technical SIG, and presented a paper at the 2010 AGI conference about the importance of context information in geovisualisation.

SELECTED RECENT PROJECTS:

- I am currently managing the development and production of an internet-based interactive geotechnical training course in collaboration with London University academics for degree level students and CPD Civil Engineering and Earth Science professionals. This work includes developing databases in GI Systems; sql queries for bore hole and geotechnical field test data; producing mapping and field report information; VRML 3D ground models; applications in Visual Basic; and web site development.
- I am production manager for the London Basin Forum's Geological Atlas for the in collaboration with London, Cambridge and Brighton Universities, the British Geological Survey, The Geological Society, major construction companies and technical consultants. I am responsible for the Atlas maps and diagrams. The Atlas will be a significant geological and geotechnical reference work of south-east England for planners, developers and the construction industry. It is due to be published in 2014.

- East London urban redevelopment. *I was responsible for the geographic research and the production and management of a topographic base from imagery and survey and the integration of detailed development site plans for the East London Development Corporation. This included technical plans and publicity brochures and posters. This mapping won the British Cartographic Society's design award.*
- A power-line routing and tower location report for a leading UK energy distribution network service client. *This was an information management and data analysis project which required data collection and analysis for the production of digital elevation models (DEM's); geomorphology and geology models; drift depth analysis; slope analysis; accessibility and land-use assessment; and optimal path analysis.*
- The visualisation of various types of data (raster/ vector and database formats) on Google Earth /Virtual Earth for a web-based geographic information publisher. *This was an information management and presentation project using Manifold GIS, PostGIS and GeoServer. This project adapted existing data sets, imagery and photos, and used many open-source solutions.*
- Building an accurate GIS for London street network database for a major web-based information and marketing company located in London. *This included the production of a detailed digital georeferenced street network of London using GPS survey and imagery in preparation for the integration of additional infrastructure datasets.*
- During 2006-7 I attended a full-time Geographic Information Science MSc at UCL. My research topic was the integration and visualisation of geotechnical, underground structure, and utility data with surface mapping and imagery, and investigated how elevation data can be integrated with utility pipes and cables, underground tunnel structures and geotechnical data and visualised in 3D within a GIS environment.
- Geospatial databases and military mapping for the Ministry of Defence, London. *This work involved geographic research and evaluation and information management and analysis for military intelligence purposes.*
- I have been cartographic and geographic information manager responsible for research, analysis and cartography for numerous atlases and reference books for many geographic information publishers since 1990. Recent examples include:
 Guide to Wetlands, a world thematic atlas for George Philip Ltd, London. *This involved integrating a United Nations database with other topographic and location datasets and the design and production of about 50 maps.*
 Oz Clarke's World Atlas of Wine: A world atlas of for Webster's International Publishers/Anova, London. *This involved data collection, information management and analysis, data integration, and cartographic presentation of topographic and viticulture information from around the world and the production of over 250 maps and diagrams.*
- Research and production of digital thematic databases of the UK including topography, administrative boundaries, communications, gazetteers and population to be used in geographic information systems for Cartographic Solutions Ltd. *These digital products were supplied to Government Office for the Regions, The Readers Digest and other geographic information publishers.*
- The Bauchi State Atlas, Nigeria. *I was responsible for the assembly and compilation of geographic data to produce an atlas of the topography, geology, hydrogeology, soils, climate, vegetation, land capability, land-use, population, communications and commercial activity maps, and a companion gazetteer.*