



Alison Heidi Nock, PhD

Mapping and Geographic Data Specialist

Expert in data modelling and spatial data infrastructures development and integration for a range of fields including Flood prediction & modelling, disaster management, coastal engineering, land and property; environment and oil & gas, fibre-optic telecommunications.

Specific project experience includes involvement throughout the project lifecycle from feasibility study; end-user requirement; project management; business requirements management and software development for the GIS and cartographic management sector.

EDUCATION

- 2014 Doctor of Philosophy (PhD) Geographical Sciences, Plymouth University, UK
- 2000 Master of Science (M.Sc.) Geographic Information Systems
- 1995 Bachelor of Science (B.Sc.) Land Surveying

WORK EXPERIENCE

- 2016 Consultant, Data Management – Cable & Wireless
Data management design for submarine cable maintenance
- 2015 Consultant, Marine and GIS data analysis - TE Subcom
Providing structured data QC services for the installation of a Europe to Asia fibre-optic submarine cable system. Data QC includes marine geophysical survey reports, charts and GIS deliverables.
- 2014 - 2007 Coastal Flood Risk, Data Modelling, Research and Analysis – UK Govt Funded Research
Developed ArcFLOOD, the hybrid coastal flooding data architecture. Designed to alert UK disaster management agencies with predicted threat levels. Simulated extreme coastal flooding for a range of climate change scenarios. New flood risk mapping created indicated the potential risk to infrastructure and property, insurance risk and depicted the failure of flood defence structures vital to emergency preparedness teams.
- 2002 – 2007 GIS Project Manager – UK Land Registry Department
Technical GIS Advisor/ Specialist to Land Registry Executive Board and Ministerial level on Geographic Information Systems (GIS). Technical Account management for IBM, ESRI, TENET and Ordnance Survey. Software development team project management and business modelling for Property GIS, Registration of Land GIS e-conveyancing and the Financial Times, UK Property Price Index.



- 2001 – 2002 Project Team Leader – Ordnance Survey of Great Britain
Conducted new research into the OS MasterMap Topography layer for spatial data management. Developed and designed the Oracle database schemas and data model which led to the establishment of an OS MasterMap database (the definitive UK digital map of more than 450 million uniquely identified geographic features).
- 2000 – 2001 GIS Specialist – 360networks, Canada
International land and marine fibre-optic cable network mapping and data management including GIS Spatial Database designer role (Object-Oriented) for Oracle Submarine Systems. Designed corporate standards for GI data integration and implemented corporate data standards in regional locations. Managed GIS and mapping for Canada.
- 1999 – 2000 GIS Specialist – Shell Petroleum, UK
International land and marine oil & gas asset mapping and data management.
- 1998 – 1999 GIS Consultant – Environment Agency, UK
Flood risk management for England and Wales. Responsible for flood warning and cartographic mapping for the emergency preparedness team. Provided consultation directly to the Minister of the Environment, Transport and Regions, UK.
- 1998 – 1997 GIS and estate management, Industrial Port Development Corporation, Trinidad
Implemented and managed the GIS for estate management and site planning.
Conducted environmental impact assessments and ecological studies.

SPECIALIZATION SUMMARY

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|----------------------------------|---------------------------------|---------------------------------------------------|-----------------------------------|
| Client Liaison | Project Management | Advanced Analysis: Spatial Data Modelling | Emergency Preparedness |
| Technical Reporting & Writing | Cartographic Management | Geographic Information Systems | Process Management |
| Fibre Optic Cable Systems | User Requirements Management | Coastal Flood Risk modelling and assessment | Database Management Systems |



PERSONAL DETAILS

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|----------------------|--------------------------------|------------------------|-----------------|
| Full Name | Alison Heidi Nock | Status | Married |
| Date of Birth | 7 th September 1971 | Languages | English |
| Nationality | British | Sex | Female |
| Home | Vancouver, Canada | Drivers Licence | Full (Canadian) |
| Residency | Permanent Resident of Canada | | |

ADDITIONAL INFORMATION

Contribution to Journal and Conference publications:

Esteves, L. S., Williams, J. J. Nock, A., and Lymbery, G., 2009: Quantifying shoreline changes along the Sefton Coast (UK) and the implications for research-informed coastal management, J. Coastal Res., SI 56, 602–606, 2009.

Nock, 2008. Coastal Flooding By Extreme Events: 21st century challenge. Proceedings of the Plymouth Postgraduate Symposium 2008. Compilation © 2008 University of Plymouth, UK, pg 105-116. ISSN 1753-7061.

Conference abstracts and journal publications submitted:

CERF: Estuaries and Coasts in a Changing World 2009, Portland, Oregon. Abstract accepted: Paper prepared for submission to conference proceedings.