RÉSUMÉ - Graham Patrick Morgan

Profession: Geospatial Solution Architect

Experience: 15 years

Date of Birth: 24 July 1966

Nationality: British

EDUCATIONAL QUALIFICATIONS

(1990 - 1991): **Master of Science: Geographical Information Systems**
University of Edinburgh.
Distinction Awarded.

(1985 - 1988): **Bachelor of Science (Hons): Geology**
Royal Holloway and Bedford New College,
University of London.
Upper Second Class Honours Awarded

PROFESSIONAL ASSOCIATIONS

- Association for Geographic Information (AGI)
- Association for Information and Image Management International (AIIM)
- American Management Association (AMA)

CERTIFICATIONS

(2004) GIS Certified Professional (GISP)
GIS Certification Institute

(2002): Microsoft Certified Professional (MCP)
Designing and Implementing Databases with MS SQL Server 2000 Enterprise Edition

(1998) Smallworld GIS World Class Partner
Accredited Application Developer

AWARDS

(2002): ValueNet Innovative Solution in Government
(2000): Convergent Group Outstanding Project Team Performance
(1992): Association for Geographic Information (AGI) Student Award (Runner up)
(1990): Natural Environment Research Council Postgraduate Sponsorship

SUMMARY OF PROFESSIONAL EXPERIENCE

Communication

Graham possesses excellent written and oral communication skills; he has strong presentation skills and is a regular speaker at conferences. He has a warm and confident personality, and is a sound team player with strong leadership skills. Through a variety of consulting roles throughout the world; Graham has demonstrated the ease with which he can take up new challenges and adapt to new environments. Throughout his career he has cultivated a reputation as an innovative and committed professional.

Geospatial Solution Architecture

Graham has developed solution architectures for a number of government and utility organizations. His solutions are characterised by the integration of geospatial capabilities into the heart of the enterprise-wide

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technical architectures. Graham believes that these systems need to be designed at both business and technical levels to provide a set of collaborative services that facilitate the geospatial-enablement of existing business systems and workflows.

Graham is familiar with a number of architecture methods and notations including TOGAF and Zachman. He is also experienced with all levels of the IT services stack from network communications through operating systems, data management, content management, workflow management, and application integration, to presentation, security and system management layers and technologies.

He is keenly interested in a number of emerging areas, including geospatial content management, event driven workflow, service oriented architectures, geospatial standards & evolving tool support, and geospatial catalysts such as Google and mobile location technologies.

Geographic Information Systems

Graham is particularly well qualified in the field of GIS and specialises in the definition, specification and development of enterprise geospatial information management systems. He is experienced with a wide range of geographic technologies, including: ESRI ArcGIS/Geodatabase, Oracle Spatial, GE Smallworld, Intergraph, and Safe FME, as well as a number of open source initiatives and OGC standards such as GML, WMS and WFS. Graham has designed and developed a number of large scale geospatial data management systems to support asset management, and land & resource management operations.

Spatial Data Warehousing

Graham has engineered a number of successful spatial data warehouses for City and Provincial/State governments. Warehouses have been designed and developed using a range of technologies including MS SQL Server, Oracle, Oracle Spatial, and ArcSDE. Graham believes that a spatial data warehouse can provide a key enterprise application integration service by performing as a data hub. A common information model implemented at the warehouse/hub supported by a business governance structure and technology services to transform data meanings between business system models and the warehouse model can provide an effective way to share and integrate data that is particularly well suited to geospatial systems and data. Graham has led projects to implement geospatial data integration solutions to continuously supply data warehouses from a range of geospatial and non geospatial business systems. He also sees tremendous potential in enhancing Business Intelligence capabilities by exploiting the spatial dimension of corporate information.

Geospatial Portals

Graham has designed and led the development of a number of geospatial portal projects. Web portals have been designed to provide a means of locating, browsing, analysing and distributing spatial data and services within an organization and externally to partners and the public. Solutions have been designed using a range of technologies including ArcIMS, IBM WebSphere, Oracle Application Server, Portlets & eCommerce, Safe FME & SpatialDirect, and IMF.

Project Management

As a Project Manager and Project Engineer Graham has been extensively involved with program management from initial business development and program definition, through planning, resourcing, monitoring and execution, to delivery, change management and solution acceptance. As a key member of account leadership teams he has lead up to 20 developers and consultants working to aggressive schedules whilst also liaising closely with customers to validate needs, manage expectations, and resolve issues. Graham is experienced with a number of project management methods, system development methodologies and best practices.

Business Consulting and Business Development

Graham is an experienced Consultant who brings substantial business domain experience, technical expertise, personal communication and writing skills, and knowledge of consulting techniques. He has worked on a range of consulting assignments including: needs assessments, technical system reviews, project visioning, business case development, and proposal development.

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Software Development

Graham has been extensively involved in a number of application design and development projects, from the initial consultation through to the roll out of large-scale production systems. He is a very capable application developer and is familiar with a number of languages, patterns, CASE tools, and development & testing environments.

Database Development and Implementation

Graham has in-depth knowledge of relational & object-relational database principles and their application with respect to the Microsoft SQL Server, Oracle, Geodatabase and Smallworld database systems. He is familiar with information engineering, data modelling, database development tools and SQL, as well as a number of long transaction implementations. Graham has considerable experience in the replication of spatial data between databases using a range of techniques and toolsets.

Oilfield Geology

After concentrating on basin dynamics, structural geology and geotechnical engineering during his Bachelor's degree, Graham has worked throughout the oilfield; both in the exploration office and at the rig site. He has dealt with the maintenance of spatial databases; monitoring of engineering parameters, geological sample collection, core logging, and with the production of geological reports and stratigraphic logs to support the on-site evaluation of hydrocarbon bearing formations. Graham has travelled extensively with the oil industry; he has worked on location throughout the North Sea, in Denmark and as far a field as North Yemen.

Research

Graham is particularly interested in metadatabase principles and development. Research in this area has received recognition from the Association for Geographic Information in the United Kingdom. Graham has pursued these interests in Australia where he was involved in a number of projects, notably ERIN's PCQuest/ FINDAR initiative and the AGIA Government Geoscience Database Policy Advisory Committee in the design of an Australian national geoscience data management system. He has completed metadatabase contracts on behalf of the Murray Darling Basin Commission, and for the Australian Department of Defence in the identification of data holdings for the area of the proposed East Coast Armaments Complex in preparation for an Environmental Impact Assessment.

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EMPLOYMENT HISTORY

Aug 2007 to Present **Spatial Consultants Ltd, United Kingdom**

Managing Director/Solution Architect

Supported by 15 years at the forefront of GIS implementation projects around the world, Graham established Spatial Consultants to provide specialist geospatial business advice; integration services; and spatial data management & quality improvement services to a global market.

Aug 2004 to July 2007 **Forte Consulting Ltd, BC, Canada**

Managing Partner/Solution Architect

Graham joined Forte Consulting as managing partner of the Victoria office, responsible for securing and managing geospatial consulting contracts with the BC provincial government and local municipal governments. He worked directly on a number of geospatial contracts in Victoria and for RWE Thames Water in the UK.

Jan 1999 to Jul 2004 **Atos Origin, USA**
(Thru acquisition of SchlumbergerSema, Convergent Group)

Solutions Architect, Project Engineer

Graham was engaged in the definition and development of enterprise geospatial data integration solutions for American City and State governments and utilities. Graham provided technical direction and management on account leadership teams in addition to consulting and business development. He served as leader of the GIS special interest group within the Schlumberger worldwide knowledge management community and was extensively involved as a geospatial evangelist within Atos Origin's Consulting and Systems Integration practice.

May 1997 to October 1998 **Perot Systems Europe, UK**

GIS Applications Developer

Graham was engaged in the development of Smallworld GIS applications for a large electrical utility company in the UK. Projects were organised in RAD teams working to a demanding delivery schedule. He liaised directly with Smallworld Systems in the management of vendor software issues and enhancement requests. Graham also designed an integration solution between a SAP R/3 general ledger and a proprietary payroll system.

Sept. 1995 to Dec. 1996 **Ministry of Natural Resources, Peterborough, Ontario**

Senior GIS Systems Analyst

Contracted through Spatial Knowledge Engineering of Toronto to the Ontario Ministry of Natural Resources, Graham worked on the development of a major corporate Arc/Info – Oracle data management system. As a member of the core design and development team Graham's responsibilities lay in the design of spatial object architectures, the design and specification of system components, and the design of the data load process. Graham also

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acted as an advisor to the Ministry's Mapping Requirements and Standards committee in the development of Provincial mapping standards.

March 1995 to Sept. 1995 **Royal Institute of Technology, Stockholm**

GIS Teacher/ Researcher

In this position Graham was employed to teach GIS principles to Swedish Civil Engineering Masters students. Practical sessions were held using the UNIX based GRASS GIS with emphasis placed upon structure and accountability. Job responsibilities included syllabus review and update, project design and course preparation; including familiarisation with Intergraph's MGE GIS, Sybase's RDBMS and C language.

July 1993 to Dec. 1994 **Callahan Fox & Associates, Canberra**

Senior GIS Specialist

Graham was recruited by Callahan Fox & Associates to enhance their GIS and spatial metadatabase expertise. He was involved in a range of GIS, database and metadatabase consultancy projects, working with a number of Commonwealth Government organisations, including Department of Defence, Environmental Resources Information Network, Australian Nature Conservation Agency, Australian Survey and Land Information Group (AUSLIG), and the Australian Heritage Commission. Graham was involved in all project areas; from initial registering of interest, tendering and contract negotiation, through requirements analyses and system assessment, to the hands on application development and spatial analysis.

July 1992 to May 1993 **Travelling throughout SE Asia**

Sept. 1991 to June 1992 **Sperry Sun Drilling Services**

Senior Logging Geologist (North Sea Basin)

Graham was contracted to Maersk Oil and Gas Ltd, of Copenhagen, Denmark, to work at the rig site. Duties were: to monitor the drilling operation with emphasis upon pressure control and rig safety; to log cores; to produce complete computerised geological logs of sections drilled; to evaluate possible hydrocarbon bearing formations; to produce geological reports, and to communicate findings to the appropriate rig personnel and director of operations on shore.

Oct. 1990 to Oct. 1991 **Undertaking GIS Masters Degree, Edinburgh**

Sept. 1989 to Oct. 1990 **Sperry Sun Drilling Services**

Logging Engineer (Middle East)

Contracted to oil companies throughout the North Sea region and the Middle East, Graham was responsible for the on site collection, description and interpretation of geological samples. His duties included the production of both drafted and computer generated geological engineering logs, the maintenance of all Sperry Sun sensor equipment, evaluation of hydrocarbon shows and the production of geological reports.

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May 1989 to Sept. 1989 **UNOCAL (UK)**

Technical Assistant
Exploration Dept: Europe, Middle East and North Africa

Graham was contracted to update and maintain UNOCAL's database with spatial information related to the eleventh round of North Sea block licensing. Duties included the collation, digital encoding and editing of exploration data and the provision of information within the exploration department.

SELECTED PROJECTS

BC Base Mapping & Geomatic Services, Geodatabase Management Services*:* A consulting engagement to provide specialist support to the Cadastral Base Mapping Section in the development and publishing of land parcel geospatial information products from their operational system to the BC government's central geospatial data warehouse for distribution to government, partners and the public. A logical data model of the operational and warehouse environments were developed and a framework based upon Oracle, Geodatabase and ArcGIS Server toolsets was established to support quality assurance and acceptance of contracted data sets.

Government of the North West Territories, Spatial Data Warehouse: Forte Consulting, in partnership with CGI Group Inc. were retained to provide specialized expertise to support the design and application development of a Spatial Data Warehouse and web portal for the North West Territories. The warehouse enables spatial data and imagery to be shared among government agencies and with the general public via the Canadian Geospatial Data Infrastructure Geoconnections Portal. Graham was engaged as the Solutions Architect for this project.

BC Ministry of Agriculture and Lands, Integrated Land and Resource Registry*:* Forte Consulting was been retained, as part of a Sierra Systems led consortium, to provide specialized spatial data management, design and application development services to the Integrated Land and Resource Registry (ILRR) Project. The goal of the ILRR Project is to provide a single source for querying land and resource related rights and interests on crown land in British Columbia. This project involves integrating data within 20 operational government systems managed by 19 different Interest Granting Agencies across the province. Graham participated as a Senior Business Analyst and Team Lead for the Data Management Stream, providing technical management of project resources and business consulting.

***RWE Thames Water UK Integrated Asset Repository*:** Graham was subcontracted by Atos Origin UK, through Forte Consulting, to support the development of an Integrated Asset Repository for RWE Thames Water. The IAR will rationalize numerous asset data stores and applications to provide a cross-departmental geospatial platform (based upon Oracle Spatial 10g) designed to support end-to-end business processes. Graham provided specialist consulting support, initially in the development of the winning proposal and presentation, and subsequently as GIS Solution Architect in the development of the solution roadmap.

City of Kansas City New GIS*:* A multi-phase project to streamline business processes across the City whilst supporting interoperability between Departmental GIS. This solution comprises an Oracle Spatial data warehouse supplied by near real time data feeds from local GIS systems, which in turn aggregate related data from other business systems. The resulting data integration architecture forms a fundamental service within the City's Enterprise-wide Technology Architecture. Messaging and Workflow management middleware orchestrate communication between business tasks that are exposed as Web Services in a citywide Service-Oriented Architecture. Data and derived services may be provided through the City eCommerce Portal supporting a cost recovery model to fund shared IT services.

SchlumbergerSema Integrated Criminal Justice Management*:* Working with the SchlumbergerSema Public Sector practice, the National Centre for State Courts and FileNet Professional Services, a comprehensive model for justice management was developed. This model leveraged the emerging capabilities of J2EE application platform suites and rules engines to provide for event-driven case flow management, whilst providing for a common set of IT services across Texas County government. SchlumbergerSema received the ValueNet 'Innovative Solution in Government' award for this solution.

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***State of North Dakota Enterprise GIS**:* A consultancy to design the system architecture for a state-wide geospatial data distribution system modelled on the ESRI Geography Network concept. Working closely with the State Coordinator, Departments and IT staff a secure and highly scalable architecture was developed and proven. The State's existing IT standards and infrastructure including IBM WebSphere J2EE application server and 'Shark' SAN storage were leveraged. The State received a 'Special Achievement in GIS' award for this program.

***City of Portland Enterprise GIS**:* A 2 year project to develop an enterprise GIS platform for the City. ArcGIS data maintenance environments were developed for City Bureaus; transactional replication technologies were used to synchronize the central warehouse each evening with current data. Sophisticated locational-specific data integrity rules were enforced through a custom validation harness. Deployments covered the management of Address, Transportation, Parcel, Water and Sanitary facility data.

***City of Portland Multiple-Platform GIS Hub**:* A 12 month project to facilitate data sharing between numerous City Bureaus that employed a rich mix of GIS platforms. Spatial data translation services were used by an ETL mechanism to populate an SDE data warehouse. SQL Server replication facilities were customized to distribute data to remote data centres. A web portal provided access to all City users.

East Midlands Electricity Asset Management System. A large long-term project to develop a Smallworld based GIS to manage the distribution assets of a large electrical utility company in the UK. The database models the equipment and plant that constitute the distribution network, permitting network simulations to be performed. Records are held in a variety of 'views', including actual position (geographic view) and topology only (schematic view). The project involves, not only building a system to maintain this information, but also a data capture system, and a large 24 hr/day data capture operation.

Development of the OMNR NRVIS System. A contract with the Ontario Ministry of Natural Resources to design and build a province-wide natural resource information system to assist the Ministry in its mandate to preside over the sustainable development of forestry whilst protecting associated eco systems. The Natural Resource Values Information System (NRVIS) architecture comprises Arc/Info and Oracle, with ArcStorm managing transactions and historical archiving. Jam is used to provide an interface between Oracle and the user. Data is modelled as user objects and classified into an object hierarchy, reducing the coding effort and producing a more natural environment for end users.

The AUSLIG Incremental Update System. A consultancy to design and build an Arc/Info application as part of AUSLIG's MainTools digital data production and maintenance system. The new AML modules compare current and previous versions of data, isolate differences and produce Incremental Update files for client databases.

A Comprehensive Mapping and Database for Potential East Coast Armament Sites. A consultancy for the Project Director Base Development, Australian Department of Defence, Navy. To undertake user requirements studies, functional analysis, leading to system design and specification, for an information system to support and expedite the environmental assessment process of the proposed armaments site at Point Wilson in Victoria. Included a Cost-Benefit Analysis to determine the economic validity of the proposed ECAC Information System which had to be relocated from Sydney in preparation for the 2000 Olympic Games.

The Murray-Darling Basin Vegetation Directory. A consultancy for the Environmental Resources Information Network and the Murray-Darling Basin Commission to establish a virtual network between custodians and users of vegetation data through the development of a distributed metadatabase system established through NRIC's Oracle based FINDAR metadatabase.

Extensive Oil Industry experience working on rigs throughout the North Sea, Denmark and the Middle East; and with many well types from wild cat exploratory to horizontal production in a wide range of geological provinces.

Masters Thesis. Submitted to the University of Edinburgh. This 6 month research project, initiated through the British Geological Survey, examined the management of geographical information. A PRO*FORTRAN application was developed to automatically document datasets produced within Arc/Info.

INTERESTS

Graham maintains a wide range of interests, he has pursued a number of these to a high standard; representing his County in both tennis and athletics. Graham has climbed, skied and trekked extensively; and occasionally instructs for his family's mountaineering business. More recently he has taken up mountain biking and golfing with somewhat mixed success.

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PUBLICATIONS AND PRESENTATIONS

- "Advanced Oracle Database Tuning for ArcSDE Spatial View Performance", forthcoming 2006. Summary available at: http://forums.esri.com/Thread.asp?c=2&f=59&t=46493&mc=46#569012
- "The Integrated Land and Resource Registry of British Columbia", R. Munzer, ESRI User Conference Proceedings, 2005. Contributing author.
- "Portland Hub Facilitates Access to Public Information." Presented at the ESRI South West User Group Conference, Telluride, October 2004
- "Lessons in Geospatial Data Warehousing – A Proven Approach to Enterprise Data Integration." Presented at GITA Conference, Seattle, April 2004.
- "Leveraging GIS Investments through Integration – Case Studies from City and State Government." Presented at the City of Houston GIS Day, 2003.
- "Facilities Inspection and Maintenance." Presented at the ESRI User Conference, San Diego, 2003.
- "Realizing Benefits in High Volume Court Systems through well Architected Business Process Management, Content Management and Decision Support". Presented at the FileNet Developer's Conference, Newport Beach, 2003.
- "Creating the Data Hub." Co-authored with B. Elliot. Published in GIS Vision Magazine, August 2002.
- "Rapid Implementation of an Enterprise GIS Warehouse for the State of North Dakota". Co-authored with Bob Nutsch (State GIS Coordinator) and presented at the ESRI Users Conference 2002.
- "Architectural Issues in the Implementation of Arc 8 based Enterprise Solutions" Presented at the ESRI Users Conference 2001.
- "The Government Gateway eGovernment solution". Co-authored with B. Meardon. Presented at the ESRI Users Conference, San Diego 2000.
- "The Portland Hub – a technical overview" Co-authored with B. Elliot. Presented at the GIS in Action GITA conference, Portland 2000.
- "City of Portland's GIS Hub Provides Enterprise Data Sharing" Co-authored with R. Schulte and B. Elliot. Published in ArcNews, Fall 2000.
- "The Portland Hub, integrated access and maintenance". Co-authored with T. Helmer. Presented at the ESRI Users Conference, San Diego 1999.
- "Management Procedures and People Issues are Key to Successfully Implementing GIS at Defence." Co-authored with S.D. Callahan, B.D. Johnson, and P. Stephens. AURISA '94. Sydney, Australia. November 1994.
- "Access or Reliability: A Fresh Approach to the Management of Geographic Information." Master's Thesis, Department of Geography, University of Edinburgh, 1991.

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SELECTED COMMISSIONED REPORTS

- "An Evaluation of the Objecteering\UML CASE Toolset for Spatial Data Modelling", Prepared for the Information Management Branch of the Ministry of the Environment, BC, April 2007.
- "The Integrated Cadastral Fabric of British Columbia, A Reverse Engineered Logical Data Model", Prepared for the Integrated Land Management Bureau of the Ministry of Agriculture and Lands, BC, March 2007.
- "Land and Resource Data Warehouse Data Publication and Distribution Design", Prepared for Cadastral Base mapping Section of the Ministry of Agriculture and Lands, BC, November 2006.
- "Tantalis Spatial Data Model Review", Prepared for the Integrated Registries Branch of the Ministry of Sustainable Resource Management, BC, April 2005.
- "GIS Interconnections Strategy", Prepared for RWE Thames Water UK Ltd, December 2004.
- "New GIS - Geospatial System Integration Strategy." Co-authored with F. Hall. Report prepared for the City of Kansas City, November 2003.
- "New GIS - Oracle Spatial Prototype Solution Report." Co-authored with F. Hall. Report prepared for the City of Kansas City, August 2003.
- "New GIS - Project Baseline Requirements Specification." Co-authored with S. Cooper, A. Hollen, M. Ellis. Report prepared for the City of Kansas City, May 2003.
- "Enterprise GIS Hub System Architecture Document." Report prepared for the State of North Dakota, March 2002.
- "Enterprise GIS Hub Phase III Software Architecture Document." Report prepared for the City of Portland, January 2002
- "Enterprise GIS Hub Phase III Vision." Co-authored with J. Hong, C Jenkins and S. Gurner. Report prepared for the City of Portland, January 2001.
- "Enterprise GIS Hub Pilot Project Final Report." Report prepared for the City of Portland, December 1999.
- "Natural Resource Values and Information System; Edit System Specification." Co-authored with S. Nestel and C. Harlton. Report to the Ontario Ministry of Natural Resources. 1996.
- "Natural Resource Values Information System (NRVIS) System Architecture." Co-authored with S. Nestel, M. Voltolina, L. Perera, S. Raichyk, M. Watson—Turner, and T. Lee. Report to the Ontario Ministry of Natural Resources. 1996.
- "Mapping Requirements and Standards Project for Forest Management Planning: Phase II – Mapping Standards." Co-authored with J.D. Steel, P. Klockars, D. Smith, S. Hamby, D. Holweg, K. Casselman, and A. Hughes. Report to the Ontario Ministry of Natural Resources. 1996.
- "AUSLIG Geographic Information. Main Tools: Geodata Topo—250K Maintenance Program. Incremental Update: Automated Change Detection and Unique Feature Identifier Assignment System Documentation." Report to the Australian Survey and Land Information Group. October 1994.
- "Basincare – Vegetation Mapping for the Murray—Darling Basin: The Development of a Distributed Directory of Vegetation Datasets for the Murray Darling Basin." Co-authored with S.D. Callahan and R.T. Thackway. Report to the Environmental Resources Information Network and the Murray—Darling Basin Commission. 1994.
- "A Comprehensive Mapping and Database for Potential East Coast Armament Sites: Cost—Benefit Analysis of an Information System to Support the Design and Environmental Impact Assessment of a Potential ECAC Site at Point Wilson, Victoria." Co-authored by S.D. Callahan. Prepared for the Project Director of Base Development, Division of Facilities and Property, Department of Defence. 1994.
- "The 1993 National Wilderness Update of Victoria." Co-authored by S.D. Callahan. Prepared for the Australian Heritage Commission. 1994.

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TECHNOLOGY SKILLS SUMMARY

Graham has gained considerable experience in a number of computing applications and technologies over a variety of networking and hardware environments, including Sun, HP and DEC ALPHA UNIX, Linux workstations, DOS, Windows, NT, Win95, Linux and Macintosh PCs as well as DEC and Convex mainframes running under VMS.

***Computer Languages**:* Magik, Visual Basic, T-SQL, AML, ABAP4, FORTRAN, Jpl, Postscript, Java, C, C#, Perl, Python, XML, GML

Computing Environments: DEC ALPHA, DEC mainframe, Hewlett Packard, Sun, DOS, Macintosh, UNIX, VMS, Windows (3.x, 95, NT, 2000, XP), Linux

AM/FM/GIS Software Packages: ESRI ArcInfo & ArcGIS, ArcSDE Geodatabase, ESRI ArcIMS, GRASS, Intergraph GeoMedia, MicroStation, AutoCAD, GE Smallworld, eSpatial, FME

Database Management Systems: Oracle, Oracle Spatial, GE Smallworld ds, Sybase, MS SQL Server, MySQL 4D, MS Access, dBase, INFO.

Software Engineering Methodologies: Object-Oriented Analysis and Design, UML, Process Engineering, Rational Unified Process (RUP), Rapid Performance Modelling, eXtreme Programming, IDM, Dynamic Systems Development Method

J2EE Application Servers: IBM WebSphere, BEA WebLogic, Oracle 9iAS

Business Process Management: FileNet Process Manager, Oracle Workflow

Messaging Middleware: IBM CrossWorlds, Oracle InterConnect

Enterprise Content Management: FileNet P8

Enterprise Resource Planning Systems: SAP R/3

CASE Tools: Rational Suite, Oracle Designer, Power Designer, Objecteering.

Graham is also very familiar with a range of PC packages including CASE, word processing, desk-top publishing, spreadsheets, project management, and Internet collaboration programs.

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TECHNICAL TRAINING

ESRI	ArcGIS Geoprocessing; Python Scripting and Advanced ModelBuilder	2006
Oracle	Oracle InterConnect	2004
Oracle	Oracle Streams	2004
Kimball University	Building a Data Warehouse: Roadmaps for Success	2004
FileNet	P8/Brightspire Programming	2002
FileNet	P8/Brightspire Foundation	2002
BEA	WebLogic Java J2EE Web Application Development	2002
Oracle	Oracle 9i Spatial	2002
Dr Paul Strauss	Personal Leadership Skills	2002
Intergraph	GeoMedia Professional	2002
IBM	IBM WebSphere Application Server Advanced Edition and EJB Workshop	2001
Safe Software	FME Data Transformation	2001
Gayle Towers	Capability Maturity Model (CMMI) Assessment	2001
ESRI	Advanced ArcObjects Component Development with VB	2000
ESRI	Programming ArcInfo with Visual Basic for Applications	2000
Rational	Introduction to RequisitePro Requirements Management Tool	2000
Rational	Requirements Management with Use Cases	2000
ESRI	ArcSDE Administration for SQL Server	2000
SAP	SAP Integration	1998
SAP	ABAP/4	1998
GE Smallworld	Accredited Application Developer	1998
Perot Systems	Successful Project Management	1997
Perot Systems	Dynamic Systems Development Method	1997
GE Smallworld	Smallworld Application Development	1997
GE Smallworld	Magik Programming	1997
GE Smallworld	Data Modelling with Smallworld CASE	1997
ESRI	Using ArcStorm	1995
ESRI	Customizing ArcTools	1995
ESRI	Advanced Programming with AML	1995
Jyacc	JAM Customization	1995

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