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Michael P. Mills

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An accomplished software and web application developer with demonstrated success in conceptualizing and implementing spatial database solutions. Proven ability to work independently and as part of a team on both short-term and long-term projects.

Qualification Highlights

- Extensive experience in developing web-based GIS database solutions
- Ability to stay fresh with developing Internet & GIS technologies, standards, and protocols
- Proven leadership ability to motivate co-workers and increase productivity

Education

Cook College, Rutgers, The State University of New Jersey
B.S., Environment Planning and Design: Concentration in Environmental Geomatics **May 2004**

Department of Ecology, Evolution and Natural Resources, Cook College
Environmental Geomatics Certification
Environmental Planning Certification

Specialized Courses:

- Advanced Environmental Geomatics
- Advanced Remote Sensing
- Global Positioning Systems
- Environmental Planning and the Development Practice
- New Jersey Planning Practice
- Urban Design
- Soils and Water
- Hydrology

Topics Covered:

- Business Strategy, Corporate Finance, Financial Strategy, Supply Chain Management, Ethics in Business, Marketing, Internet Marketing and E-Commerce, Negotiations, Leadership, Business Law, Pricing Strategies, Economics, International Business, Managing Strategic Transformations

Technical Expertise

Software:	<i>Database:</i> Microsoft Access, Microsoft SQL Server, MySQL, PostgreSQL <i>Internet Services:</i> IIS, ASP.Net 2.0 / 3.5, Apache Web Server <i>GIS:</i> ESRI ArcGIS Desktop / Server / IMS / SDE, Erdas Imagine 9.1
Systems:	Windows 98, NT, 2000, XP, Server 2003, Linux
Hardware:	Workstation / server design, assembly, and maintenance.
Languages:	HTML, DHTML, CSS , XML, KML, GeoRSS, PHP, Perl, T-SQL, C#.Net, VB.Net
Networking:	TCP/IP, Windows, SAMBA, Routers, Switches, Firewalls, Backups
Web Frameworks:	Google Maps API, Yahoo Maps API, Microsoft Virtual Earth API, OpenLayers.org API, Prototype, Scriptaculous, Yahoo YUI, AJAX
Productivity:	Visual Studio 2003, 2005, 2008, Dreamweaver
Graphics/Design:	Adobe Photoshop / Illustrator

Professional Experience

Center for Remote Sensing and Spatial Analysis, Rutgers University
GIS Project Coordinator

September 2005 - Present

- Independent designer / developer of Web-based GIS application for the management of storm water basin data as part of the NJ Stormwater Management Information System. Worked in unison with Department of Environmental Protection, Department of Agriculture, and Soil Conservation District Engineers to develop a versatile set of tools to accurately record and update Stormwater Basin Data. Developed in C#.Net, with support of ASP.Net 2.0, the application combines Google Maps API, Microsoft SQL Server, and ESRI Spatial Data Engine to record and display Stormwater Basin information. Database duties include server hardware design and configuration, database administration, optimization, redundancy, and backups.
-> <http://hydro.rutgers.edu/sw>
- Independent designer/manager of a Data-Sharing environment designed for the central management of sensitive project data between contributing parties. The secured system provides data access, GIS functionality and productivity tools through Microsoft Terminal Server logins. Data check-in procedures are in place to ensure data quality. Project participants include the U.S. Geological Survey and the NJ Pinelands Commission.
- Independent designer / developer, Metro Wildlife Survey (MWS), a volunteer based online submission system utilizing a customized ArcIMS interface. MWS provides an avenue to inventory endangered, threatened, and rare wildlife throughout the metropolitan areas of central and eastern NJ. Data collected is passed to Department and Environmental Protection's Endangered and Non-game Species Program for incorporation in the Landscape Mapping Project. Application runs in Linux / Apache Web Server. User profiles and species inventories are stored in MySQL databases.
-> <http://dbcrrsa.rutgers.edu/ims/metrowild>
- Independent developer of ArcIMS add-on "Map tool" used by project volunteers to collect potential Vernal Pool locations throughout New Jersey. Server-side functionality was developed in PHP. ESRI's IMS JavaScript libraries were extended to provide custom client side map functionality. The application also generated a custom word document including location data relevant to the selected survey site.
-> <http://dbcrrsa.rutgers.edu/ims/vernal/viewer.htm>
- *Ongoing research:* GIS Server development (SQL / IMS / SDE, maintenance, and customizations with a particular interest in real-time in-situ data collection. Open Source and Open Access standards, protocols, and advancements with particular interest in GeoRSS, KML and KMZ.

Point Source Internet Solutions, LLC
Personal Computer Business

February 2001 – Present

- Residential and business network installations, configuration, and maintenance
- Domain services, website design, web hosting, email hosting, search engine optimization
- Computer assembly, repairs, upgrades, equipment lease
- Web application development
- Consulting, training

Moffatt and Nichol Engineers***GIS / Database Programmer Internship*****May 2004 – August 2004**

- Sole programmer, Trade Analyst, an effort to automate intensive data manipulation using Visual Basic for Applications, Microsoft Access / Excel, and ESRI's Map Objects to visualize trade metrics through a number of U.S. Ports.
- Automated daily GIS tasks using ESRI Map Objects. These include and are not limited to, spatial selects, joins, transformations, and data summaries.
- Automated reporting and management functions with SQL stored procedures.

Vertices, LLC***Web Development Internship*****January 2004 – May 2004**

- Lead developer, Montgomery Township Historical Sites, an interactive map detailing sites of historical significance in Montgomery Township, NJ. Application is based off of Vertices, LLC's proprietary internet mapping engine, IM, and is written in an early version of Microsoft Active Server Pages. Data is stored in a Microsoft Access Database.
<http://www.gismap.us/mths>

Teaching Experience**Department of Ecology, Evolution & Natural Resources, Rutgers University****2005 - Present**

- *Instructor / Part Time Lecturer*: Fundamentals of Environmental Geomatics Lab
Fall Semesters 2005, 2006, 2007
- *Teaching Assistant* – Field Techniques in Ecology & Natural Resources
Spring Semester and 5 Day Field Camp in Stokes State Forest 2005, 2006, 2007
- *Instructor / Part Time Lecturer* – Field Techniques in Ecology & Natural Resources
- Spring Semester and 4 Day Field Camp in Stokes State Forest 2008

Continuing and Professional Education, Rutgers University**Fall 2006*****Assistant Instructor, Cartography for GIS Users******Assistant Instructor, Designing GeoDatabases***

- Assisted primary instructor with lecture materials and student questions

References

Richard G. Lathrop Jr. , Ph.D.

Director: Center for Remote Sensing and Spatial Analysis, Rutgers University

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Additional references are available upon request.