ROBERT J. SACCO
IT Professional / GIS Database Specialist

GIS Database Administrator and
Web Map Application Developer

Experienced Geographic Information Systems specialist with over ten years of managing multi-user ArcSDE databases. Recent experience with ArcGIS For Server administration and web map application development. Excellent written and verbal communication skills. Interested in GIS data administration and automation tasks and web applications for making GIS data easily accessible.

saccocom_9590@msn.com
http://robertsacco-gis.site44.com/

Work Experience

IT Professional / GIS Database Specialist – Colorado Parks and Wildlife   2006 – present
- GIS DB Administrator for state-wide MS SQL Server ArcSDE environment supporting over 150 end users and 3 terabytes of data
- Develop Python and T-SQL scripts to automate routine data management geoprocessing and administration tasks
- Proposed and developed a GIS Unit intranet presence with ASP.NET pages and applications to provide timely and effective communication to end users regarding the GIS enterprise system environment
- ArcGIS for Server administrator for publishing agency internal web GIS services, including tiled map caches
- Develop and maintain Flex and JavaScript API web map applications for the display of GIS data

IT Professional / GIS Database Specialist – Colorado Department of Public Health and Environment   2003 – 2006
- Responsible for designing, developing, and managing Division ArcSDE geodatabases, and SQL Server/MS Access attribute databases including facility and environmental monitoring data
- Develop applications, database tools, and GIS products to support the end use of Division's water, air, and soil sampling data
- Use SQL and VBA programming languages to write conversion applications to automate transfer of vast data submittals in various formats into Division system standards
- Develop models using ArcGIS Modelbuilder and edit Python scripts to automate geoprocessing tasks
- Responsible for the development of a training curriculum and training Division personnel in GIS and RDBMS applications and analyses

Senior HRIS Database Analyst – US West/Qwest Communications   1999 – 2003
- Implemented a GIS plan to integrate company personnel and union grievance database tables with ESRI GIS software to provide analysis and reports using maps to provide visual representations of business critical data
- Design, implement and administer department MS Access/Lotus Notes database schemas using CASE tools, as well as developing applications within the databases to facilitate ease of use of databases for end users
- Develop FOCUS/SQL database query language programs in UNIX and Mainframe environments
- Responsible for the conversion of various data types for matching records against disparate data sources

Forest Service Technician – U.S. Department of Agriculture   1998 – 1999
- Conducted field research on the ecology and habitat use of a western Montana Canada lynx population
- Trapped and handled lynx to collect physiological data and outfit with radio transmitting collars
- Designed and implemented MS Access databases to manage forestry data and generate requested statistics
- Uploaded data from GPS into PCs; used base station downloads to differentially correct points to improve location accuracy
- Managed GPS and GIS files that represented the ground movement of Canada lynx through habitat types
- Used Trimble and Rockwell GPS units and radio-telemetry from the ground and aerial reconnaissance to track the movement and gather location and habitat use data for Canada lynx

Research Assistant – University of Montana Division of Biological Science   1995 – 1998
- Assisted with the management of a relational database of over 80,000 plant distribution records; output of reports and county by county distribution maps; design and implementation of ancillary database tables
- Used GIS applications with data collected from the field and literature to assist in the development of a model to predict land types and areas susceptible to invasion by specific foreign plant species
- Conducted field mapping surveys of plant distributions on elk winter ranges using Magellan GPS units
- Gave presentations to natural resource managers in Federal and State agencies on the importance of developing and managing databases to monitor relevant trends in land condition

Education

Web Development Certificate
Red Rocks Community College // In Progress

Master of Engineering – GIS Specialty
University of Colorado Denver // May 2012
GPA 3.95 / 4.0

Advanced Certificate in GIS
University of Denver // November 2011
GPA 3.88 / 4.0

Advanced Certificate in Network Systems Administration
Denver Technical College // March 2000
GPA 4.0 / 4.0

Bachelor of Science – Wildlife Biology
University of Montana // May 1997
GPA 3.91 / 4.0 with Honors

Associate of Science – Biology
Nassau Community College // June 1994
GPA 3.88 / 4.0 Magna Cum Laude

Software

- ArcGIS Suite, including ArcSDE and ArcGIS For Server administration
- MS SQL Server 2008 R2 Management Studio and Profiler
- MS Visual Studio 2008 for the development of VB ASP.NET web applications and some ArcObjects Add-Ins development
- MS Web Matrix for Web Development
- MS Access 2007, including VBA development
- DNRGPS for the conversion of GPS to GIS and GIS to GPS data conversions
- Open source software for converting large GIS files to Garmin format for loading to basemap memory of GPS units

Languages

- SQL
- HTML / CSS / JavaScript
- Python, especially for GIS data management and Geoprocessing tasks
- ESRI JavaScript API
- VB.NET and ASP.NET
- Some Flex and ActionScript development with ESRI Flex API

Publications

- Sacco, R. 2012. [Application of MEng-GIS Coursework To Several Projects For Improving The Administration Of A Colorado State Agency Enterprise GIS.](#) MEng-GIS Capstone Report. University of Colorado, Denver.
- Odell, E.A., F.M. Pusateri, and G.C. White. 2008. [Estimation of Occupied and Unoccupied Black-Tailed Prairie Dog Colony Acreage in Colorado.](#) Journal of Wildlife Management. 72(6):1311–1317. (Cited in Acknowledgments for GIS & GPS data management support for this project).
- GIS in the Rockies. 2004. Presenter of the Colorado Department of Public Health and Environment implementation of ArcSDE Geodatabase and Web Application.
- Rice, P.M., J.C. Toney, R. Sacco, and D. Cooksey. 1997. Climatic correlations and predicted potential ranges of species in the Montana Weed Seed Free Forage Program: First approximations. Final Report, Coop. Agric. Pest Survey, Dept. Plant and Soil Sci., Montana State Univ., Bozeman. 156 pp.
- Rice, P.M., J.C. Toney, and R. Sacco. 1997. Potential exotic plant species invading the Blackfoot drainage. Bureau of Land Management, Garnett Resource Area, Montana. 89 pp.

Professional Training

- ArcGIS For Server: Site Configuration and Administration – ESRI Instructor Led Training
- Building Web Applications Using the ArcGIS API for JavaScript – ESRI Instructor Led Training
- ArcSDE Administration For SQL Server – ESRI Instructor Led Training
- Maintaining a Microsoft SQL Server 2005 Database – Ameriteach Instructor Led Training
- Introduction to Microsoft Visual Basic .NET Programming – Ameriteach Instructor Led Training

References

References provided upon request.

Professional Affiliations

GIS Colorado – 2 years.