Michael M. Bowser

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Professional Experience:

Senior Geospatial Specialist   October 2013 – Present
Wetland Studies and Solutions, Inc., Pittsburgh, Pennsylvania
- Worked as GIS lead managing data and providing mapping services for a transmission power line project spanning over 1,000 miles
- Developed applications using C#, Visual Studio and ArcObjects to create custom mapping applications
- Used Leaflet and GeoServer to create a web mapping application used on the Wetland Studies and Solutions, Inc. company website
- Generated project maps to be used for environmental analysis, reports, and presentations in GIS and AutoCAD software
- Aided in the creation and maintenance of a relational database management system linked to a series of maps that produces reports
- Created constraints maps for clients to identify sites for potential development using spatial queries and geographic analysis tools
- Assisted staff with AutoCAD spatial data creation and spatial reference system conversions/scaling

GIS Technician   January 2013-October 2013
Gibson-Thomas Engineering, Latrobe, Pennsylvania
- Constructed GIS techniques to be used for mapping municipal water, wastewater, and stormwater utilities
- Prepared GIS mapping and developed data to support numerous sewer system models
- Worked with survey team to capture data for completing system maps

GIS Technician Intern   May 2012-May 2013
The Carnegie Museum of Natural History: Powdermill Nature Reserve, Rector, Pennsylvania
- Managed a research project to map tornado damage within the nature reserve
- Used Python and Java programming languages to develop a program that calculates the amount of carbon in trees
- Produced high quality trail maps for visitors, employees, and researchers of the property
- Created customized ArcGIS geodatabases for nature reserve research projects

GIS Technician   September 2011-January 2013
Institute for Mine Mapping, Archival Procedures and Safety, Indiana, Pennsylvania
- Analyzed and recorded geographic and attribute data from historical mining maps
- Preserved historical maps and documents through digital scanning or imaging
- Utilized historical map metadata, georegister map scans to the Earth's surface with ArcGIS
- Digitized underground mines and associated attribute data using ArcGIS Editor functionality

Education:

Master of Geographic Information Systems   2015-2018 (Expected)
Pennsylvania State University, World Campus | State College, Pennsylvania   Overall GPA: 3.83
Major: Geographic Information Systems

Bachelor of Arts   2009-2013
Indiana University of Pennsylvania, Indiana, Pennsylvania   Overall GPA: 3.51
Major: Geography with GIS Option   Major GPA: 3.77

GIS Skills:
ArcGIS Desktop (v10.x), ArcGIS Server, GeoServer, Leaflet, OpenLayers, ArcPad, Collector for ArcGIS, Geoprocessing Analysis, Network Analysis, Spatial Analysis, Garmin GPS, Quantum GIS Desktop, ArcGIS Pro

Computer Skills:
JavaScript, HTML, CSS, Python, C#.NET, AutoCAD, Microsoft Office Suite, Adobe Dreamweaver, Adobe Photoshop, Microsoft Access, R, Visual Studio, Unity

Publications:
Bowser, Michael M. *Black Birch Trail* [Map]. In: Gretchen N. Peterson. *GIS Cartography: A Guide to Effective Map Design.* Second Edition. Boca Raton, FL: CRC Press Taylor & Francis Group, 2015, p.276.