Bradley Adam Andrick

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Education

University of Wisconsin - Madison, Madison, WI
> **M.S. Cartography and Geographic Information Systems Development**, May 2019
> Concentration: **GIS Development and Programming** ● GPA: 4.0
> Topics include: Programming, Spatial Analysis Techniques for Development, UI/UX Design & Big Data Visualization, Mobile App and Cloud Based Development, Real-World Integration
> Skills: Full stack programming for the web, desktop, and mobile devices: Python, Java, SQL, NoSQL, GDAL, OGR, HTML, CSS, JavaScript, Bootstrap, ArcGIS APIs and SDKs, Leaflet, CartoDB, Mapbox, CartoCSS, D3.js, Illustrator

James Madison University, Harrisonburg, VA
> **B.S. Geographic Science**, May 2014 ● Minor: Environmental Science ● Major GPA: 3.7, Overall GPA: 3.5
> Concentration: Environmental Conservation, Sustainability and Development

Professional Experience

Programmer/Technology Solutions Administrator – ArborMetrics Solutions LLC, Asheville, NC   August 2016 – Present
- **Software Developer**: responsible for web and mobile platforms as well as backend architecture and design
- Developed software in .Net(VB and C#), JavaScript, Python, Java, SQL and the ESRI suite of GIS dev tools
- Business development support; on site customer visits, conferences, and consultations
- Assisted with computer deployment; distribution, reimaging, reconditioning and technical support assistance
- Project Management in support of AMS Technology Solutions development

GIS Coordinator – James Madison University, Harrisonburg, VA   June 2015 – August 2016
- Oversaw the University's Facilities Engineering Geographic Information System (GIS)
- Maintained, updated, and expanded the GIS capabilities of the department – planned an enterprise migration
- Designed methods to distribute GIS data to Facilities staff
- Researched and code/developed custom GIS applications, resources, and capabilities

GIS Developer – James Madison University, Harrisonburg, VA   May 2016 – August 2016
Virginia Foundation for the Humanities – Grant supported
- Developed and coded a mobile friendly web mapping interface (HTML, CSS, JavaScript) that allows patrons to view multiple georeferenced historical Sanborn maps overlaid on modern day imagery with independent opacity sliders
- Researched and provided guidance for all GIS related processes for the project duration

GIS Technician – James Madison University Facilities Engineering, Harrisonburg, VA   May 2014 – June 2015
- Analyzed, managed and expanded GIS resources for Facilities Engineering
- Coordinated geospatial server initiative and began developing web mapping applications
- Collected and updated existing data using advanced survey grade GPS units (TSC3 and R10)

Teaching Assistant – James Madison University, Harrisonburg, VA   Aug 2013 – May 2014
- Integrated Science and Technology/Geographic Science Department
- Assisted Professors with grading, lectures, and testing

Engineering and Planning Intern – Shentel, Edinburg, VA   May 2013 – May 2014
- Assisted in the transfer of data from AutoCAD into a telecommunications GIS (M4)
- Helped to import and export outside and inside plant equipment data using FME Universal Translator

Percussion Instructor – Central High School, Woodstock, VA   June 2009 – Aug 2013
- Coordinated and taught a group of 10-15 middle and high school students
- Wrote music and drill for the drumline and percussion sections of the marching band

Buildings and Grounds Summer Assistant – Shentel, Edinburg, VA   June 2009 – Aug 2012
- Responsible for conducting maintenance at properties throughout tri-state company service area
- Completed work orders while operating company vehicles and maintenance machinery

Conference Presentations

"Using Spatial History to Challenge the Exclusive Past", National Council for Public History Conference, Baltimore MD, 2016

Presentation note:
Dr. Kevin L. Borg (Associate Professor, History) and **Bradley A. Andrick** (GIS Coordinator, Facilities Management) presented at the National Council for Public History conference. **Borg** and **Andrick's** project shows how spatial analysis can be within the reach of local historical societies and community groups.

"Designing a GIS for Campus: Planning, Development, and Maintenance", Virginia Chapter of the Association of Physical Plant Administrators (VAPPA) Conference, Harrisonburg VA, 2016

Presentation note:
Brad Andrick, JMU & **Dale Abbott**, VHB – Discusses how JMU's Facilities Management Geographic Information System has progressed. Specifically; how it was started, where it currently stands, and where it is going. Additional topics will also include general GIS planning from a contractor prospective.

"Leveraging ArcGIS Online: Cloud Mapping and Mobile Phone Data Collection", Regional GIS User Group Meeting, Harrisonburg VA, 2015

Presentation note:
Bradley Andrick presents on the use of mobile phone GPS data collection capabilities and current technology. Topics include history of mobile devices and GPS, cloud GIS software comparisons and how to leverage these technologies along with existing GIS infrastructure to lower costs and increase mapping capabilities.

Technical Skills

Geoprocessing and Spatial Analysis
Geodatabase Management
Enterprise GIS Design
Web Application Development
Scripting – ArcPy, JS, SQL
ArcGIS UI Customization
Model Builder
GPS/Survey Data Collection
Image Analysis
Cartographic Design
Spatial and Statistical Analysis
Coordinate Systems and Projections

Software and Development
ArcGIS – up to v10.5
(ArcMap, ArcCatalog, ArcGIS Online, Model Builder, ArcGIS Pro, ArcGIS for Server)
AutoCAD – Civil3D
Trimble Access/ TerraSync
Trimble Business Center/Pathfinder Office
Mapcom Systems M4
GoogleEarth/Maps Engine
Boundless and QGIS
Mapbox Studio and TileMill
CartoDB + CartoDB.js

Software (Cont.)
Python Scripting, GDAL/OGR, ArcPy
MS SQL Server/MySQL/General DBMS
JavaScript, JQuery, HTML, CSS, PHP
VB.NET and C# for .NET
GitHub/Versioning
Leaflet.js, Googlemaps API
Openlayers API, Esri JavaScript API
FME Universal Translator
Adobe Illustrator/InDesign
Survey Grade Trimble GPS Units (Juno, Geo XT, GeoExplorer 5, TSC2, TSC3, R8, R10)

Community Service

GIS Consulting – pro bono, Asheville Greenworks, Asheville NC, 2019

Volunteer, Energy Savers Network, Asheville NC, 2018

GIS Consulting – pro bono, Friends of Connect Buncombe, Ashville NC, 2017

Trail Maintenance Volunteer, JMU Geography Club, Harrisonburg VA, 2013

Honors

Phi Kappa Phi, (Graduate Level Academic Honor Society) joined 2018

Gamma Theta Epsilon, (Geography Honor Society) joined 2012

Phi Theta Kappa Honor Society, (Associate Level Academic Honor Society) joined 2010