

RÉSUMÉ

Abraham Brody

Geographic Information Systems Specialist
Transportation, Municipal, Planning,
Databases, and Project Management
21 years in field
ArcGIS LiDAR
AutoCAD Microstation ISO SQL

Bachelor of Geography Environment Resource Management
Clark University, 1994

Available in Boston, Southeast Massachusetts, and Remote.

2017



Career Overview

Geographic Information Systems, software, and hardware troubleshooting specialist of 21 years, who trains people how to visualize a broad range of environmental, land use, parcel, municipal planning, and transportation databases using maps and geospatial analysis software. I am able to facilitate new technologies as they emerge.

Education

Bachelor of Geography Environment Resource Management - Clark University - 1994

Skills Table

Skill	Category	Skill Level ¹	Last Used
GIS Software	ArcGIS 10.4 with extensions: Spatial Analyst, GeoDatabase platform, PLTS	4	Current
	Microstation v8i	4	Current
	TopoDOT	3	Current
	Trident	3	Current
	Modelbuilder	4	Current
	Python	3	Current
	AutoCAD Civil 3D/Carlson	3	Current
	IRAS/B	3	1998
	MapInfo	4	1996
	GPS Hardware	iPad	3
Garmin		3	1994
Trimble		3	2015
Database	Office & Access	4	Current
	Cloud	4	Current
	Filemaker Pro	4	2011
	SQL	4	Current
	FoxPro	4	1994
Programming	Microstation Design Language	4	Current
	HTML	4	Current
	Visual Basic/Microsoft Office	3	Current
	Python	3	Current
	AML	4	1995
Customer Support	C++	3	1994
	Troubleshooting	4	Current
Planning	Training	4	Current
	Transportation	4	Current
	Municipal	4	Current

¹ Skill Level: 1 – Exposure Only, 2 – Basic, 3 – Intermediate, 4 – Advanced

Employment History

Macmaps.com

1994 to Present Freelance technician

Skills: Macintosh, Windows, Unix and iOS computer consulting

- Troubleshooting hardware, software, and network problems for individuals and companies.
- Migration of data between platforms
- Author of over 200 user tips on Apple Support Communities.

Environmental Partners Group

2016 Database Developer Project

Skills: Access Database Development and Integration, Visual Basic, ArcGIS, SQL, Python, Modelbuilder, MS Excel

- Developed in house Database Management System for Capital Improvement Program, Road Surface Degradation monitoring, Sidewalk issue reporting, Ramp usability, and Roadway Sign inventories and visibility.
- Developed new reports, forms, queries, and integration with various databases.
- Used ArcGIS on MassGIS data layers to map proximity of features to each other and write Python based Modelbuilder routines to combine ArcGIS functions.
- Wrote Visual Basic and Microsoft Office Macro routines for data analysis import and export

Eldredge Survey and Engineering

2015 LiDAR Data Specialist Project

Skills: Mobile & Static LiDAR Snoopy, Faro, Velodyne, AutoCAD Civil3D/Carlson, MicroStation, TopoDOT.

- Evaluated LiDAR data against panoramic photography to provide accurate remote sensing of on and off road features and surface elevations, manholes, drainage, utility poles, wires, trees, and verified LiDAR data matched control coordinates determined by GPS survey and field survey work crew.
- Documented procedure for extracting both Mobile & Static LIDAR.
- Matched cell libraries in MicroStation with AutoCAD template of blocks to ensure easy transition between two Computer Aided Design software.
- Found methods to extract vertical layers to any level of precision desired from LiDAR in construction sites, and parsing large data sets.
- Trained staff in use of TopoDOT.

Surveying and Mapping Consultants

2014-2015 LiDAR Scanning Technician Project

Skills: Mobile LiDAR Trimble MX2, AutoCAD, MicroStation TopoDOT, Trimble Trident

- Analyzed and attributed data from LiDAR data capture of road surface, utility polls, manholes, drainage, with panoramic photography backdrop.
- Edited project legend pages in AutoCAD of ALTA/ACSM Land Title Surveys.
- Tested differences of Trimble Trident versus TopoDOT in data capture and analysis capabilities.
- Coordinated with engineers to ensure data attribution done to standard, and analysis tools used to optimal capabilities.

NOAA/FAA (Aeronautical Charting branch moved between agencies during employment)

1998-2014 Aeronautical Information Specialist/Cartographer

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NOAA/FAA (Aeronautical Charting branch moved between agencies during employment)**1998-2014 Aeronautical Information Specialist/Cartographer**

Skills: ArcGIS, BIM, Assigned work, Customer feedback responder, FracVPN, HTML, ISO, Lotus Notes, MicroStation and its MDL language, Microsoft Access, Microsoft Office, SQL, Beta testing, OS migration, Quality Control, Quality Analysis Supervision, Remote Desktop, Training, VirtualBox, Transportation, Municipal, Planning, Project Management

- Improved air transportation network planning by building and upgrading routes around radio and satellite navigation, environmentally sensitive areas, new towers, and terrain hazards.
- Routes shorten flight time, improve fuel efficiency, and direct air traffic through bad weather and night environments.
- Updated municipal region maps for air traffic control to improve issues around aircraft noise and air safety and planning for flights.
- Instrumental contributor in changing aeronautical chart production from four-color separation photographic process to CAD and GIS.
- Contributed to Building Information Management (BIM) for radio tower facility managers.
- Followed rigorous 56 day cycle reviewing work of coworkers aeronautical charts.
- Resolve questions by customers, managers, fellow coworkers and contractors regarding charts and regulated airway routes.
- Train coworkers and contractors new CAD and GIS charting techniques. Develop new criteria for depicting charts.
- Published "Notice to Airmen" to ensure pilots and air traffic controllers had the most current daily information between our chart cycles.
- Beta tested new software to ensure smooth operating system updates.
- Webmaster of Intranet website of office production resources and their documentation.
- Update projects of routes according to criteria, and coordinated with quality control team to determine if new criteria needed to be established.

Enterprise Information Systems contracted w/NOAA Marine Charts**1997-1998 Cadd Technician**

Skills: MicroStation, IRAS/B Raster GIS, Quality Control, Quality Analysis, Training, Scanning charts, Municipal, Transportation Planning.

- Charted newly dredged channels, navigation aids, and nautical obstacles to improve transportation of the national waterways, and boating transportation planning into municipal seaports.
- Quality controlled bathymetric information for marine charts, and navigation aids using Army Corps of Engineers soundings data and Coast Pilot. This allowed NOAA to expand our country's waterways for shipping.
- Clarified with NOAA reviewers the needs for contractor work to save time in NOAA's quality control. Taught fellow contractors similar procedures and offered IT help.

MRJ Technology Solutions Contractor for Patuxent Naval Air Station**1997 Digital Cartographer**

Skills: Visual Basic, Database integration, Programming, ArcView, Avenue, Microsoft Access

- Debugged Visual Basic software being developed for an E-911 portal and isolated database fields to save time and money for Patuxent Naval Air Station.
- E-911 portal integrated various databases by various base branches into an ArcView and Avenue based GIS to shorten response times to emergencies on and off base.

Maryland National Capital Parks & Planning Commission (M-NCPPC)**1996-1997****Drafting Technician**

Skills: ArcInfo Desktop, AML, AutoCAD, Cleaning topology, Quality Control, Quality Analysis, Planimetric Cadastral mapping, Municipal planning.

- Coordinated with several coworkers and supervisors a process that saved time for planners and county officials for determining property values and areas where open space could be used.
- Quality controlled contractor built digital maps from aerial surveys for spatial consistency ensuring property parcel info matched actual regions for planning of parks, and roads.

Baltimore Metropolitan Council**1995-1996 GIS Programmer**

Skills: Address Geocoding, MapInfo, Electrical utility, Police Precinct, School District mapping, Municipal, Planning. HTML, C++, Pascal, Code documentation, Municipal planning.

- Developed documentation website for GIS in-house software written in C and Pascal to save time whenever chart updates were required.
- Maintained maps of zip codes, school districts, police precincts, and fire department coverage planning, with road map overlays to save county and city time in each department.
- Provided accurate street address matching with digital map for the six county regions around and including Baltimore City. This led to fewer errors responding to emergencies throughout the region.

Additional Information

2016 Class in GIS Program Management from NEURISA

2014 ESRI Federal GIS Conference Washington DC

2014 Connecticut GIS Day

2014 FAA Hazardous Materials Communication Training.

2013 NEARC GIS conference, Nashua NH

2013 IMIA Worldwide Mapping Conference, Cambridge, MA

2013 ESRI Federal GIS Conference Washington DC Python training.

2012 November NEARC Conference Rockland Maine

2012 Certified Aeronautical Information Specialist

2010-present Trained new employees and contractors

2009 ISO training @ FAA

2005 ArcGIS course: PLTS, Arc I and II and Maptools

2004-2005 VP Programs Washington Apple Pi

2001-2005 Apple Pi Computer User group Tuesday Night Clinic Macintosh technician

1995 Volunteer National Geographic Society

1994 to 1995 USGS Volunteer – created with ArcInfo a mapping road network GIS using Arizona Digital Line Graph data. Digitized and examined USGS Geologic maps. AML programmer.

1993 -1994 Developed IDRISI GIS for Broad Meadow Brook Wildlife Sanctuary. Created Watershed Kiosk GIS of wetlands and wildlife.

Certifications

GIS Program Manager workshop – NEURISA 2016.

Aeronautical Information Specialist FAA, License 00418 July 2012 – Present

Awards

All awards below from FAA:

July 2014 15 year award. July 2014 Teamwork Award.

References

Available upon request.