

# NIKOLAS A. HAWLEY



Fairfax, VA  
484-843-4479 | nikolashawley@gmail.com | linkedin.com/in/nikhawley



## SKILLS & KNOWLEDGE

- Geographic Information Systems (GIS)
- Geospatial Analysis
- Imagery Analysis
- Cartographic Analysis & Design
- AutoCAD
- QGIS
- ArcGIS Pro
- ArcGIS Desktop (ArcMap)
- ArcGIS Online/Portal
- Google Earth
- ENVI
- ERDAS IMAGINE
- SOCET GXP
- Remote View
- Microsoft Office Suite
- Matlab
- Python
- R
- Leaflet
- Mapbox GL
- Turf.js
- Quick Learner
- Creative Problem Solver
- Works well Independently or in a team

## SUMMARY

Technically knowledgeable Geographic Information Systems (GIS) Professional and Civil Engineering & Infrastructure student. Seeking opportunities to gain experience in the civil engineering industry, and or bring a spatial perspective and analytical insights through GIS to help solve real world questions and challenges in any application. Particular areas of interest include transportation infrastructure design and planning, integration of UAS in land surveying, land surveying in general, and integration of GIS in Search and Rescue operations.

## EXPERIENCE

### Geospatial Analyst II, BAE Systems Inc., McLean, VA, Full Time

April 2019 – January 2020

- Provided operational geospatial analysis in support of various defense and intelligence missions for the National Geospatial-Intelligence Agency (NGA) and the Central Intelligence Agency (CIA).

### Geospatial Engineer, U.S. Army

February 2015 – February 2019 (Active Duty, Full Time) | February 2019 – Present (PA National Guard, Part Time)

- Developed custom geoprocessing models using ArcGIS model builder and Python scripting to apply to existing intelligence analysis workflows, cutting traditional manual analysis time from days to hours, for which, the Army Achievement Award was presented.
- Developed standard operating procedures and workflows for the implementation of spatial data management, spatial analysis, and the application of geospatial technologies within the Army Special Operations Aviation intelligence enterprise.
- Created custom special mapping and geospatial products in support of intelligence analysis for Special Operations Aviation missions over a global area of responsibility.

### Assistant Emergency Services Officer – GIS Advisor, Civil Air Patrol – U.S. Air Force Auxiliary, PA Wing, Volunteer

June 2018 – Present

- Provides GIS analysis, products, and data management in support of Pennsylvania Wing (PAWG) and Civil Air Patrol National Headquarters (CAP-NHQ).
- Researches GIS workflows for Land Search and Rescue operational support.
- Key contributor & GIS Subject Matter Expert to CAP-NHQ GIS Team in support of CAP Emergency Services and Disaster Relief operations, including strategic organizational data insights through GIS based dashboards, maps, and applications.

### Instructor, Civil Air Patrol – U.S. Air Force Auxiliary, Hawk Mountain Ranger School, PA Wing, Volunteer

October 2008 – Present

- Continuously serves as a staff member, instructor, and mentor to lead, train, and develop hundreds of cadets over the past 10 years primarily through the organization's premier national Search and Rescue and Leadership training facility, Hawk Mountain Ranger School (HMRS).
- Took on lead role in development and implementation of training plans and curriculum for HMRS's cadet staff training program, resulting in the training of about 5-10 new staff candidates annually. Continuously conducts annual reviews and revisions.

### Field Services Representative, QC Laboratories, Southampton, PA, Full Time

May 2014 – January 2015

- Collected initial field data on sewage water, manufacturing wastewater, pool water, potable city water, and various food samples for health and environmental regulatory compliance testing, and safely transported samples to laboratory for further testing.
- Managed independent work schedule, conducting between 60-80 site visits per week.

## EDUCATION & PROFESSIONAL DEVELOPMENT

### Certified ArcGIS Desktop Associate, Environmental Systems Research Institute

• Cartography MOOC • Earth Imagery at Work MOOC

### Certified Geospatial-Intelligence Professional – Geospatial Analysis Proficiency Level II, National Geospatial-Intelligence College, Springfield, VA

• Intermediate Analysis for GIS • Advanced GIS Analysis Using Models • Advanced GIS Analysis Using Scripts • Fundamentals of Spectral Exploitation • Geodatabase Design & Maintenance • Fundamentals of Problem Solving Using Python I • Activity Based Intelligence – Forensic Network Analysis • Critical Thinking for Intelligence

### Geospatial Engineer Course, U.S. Army Engineer School, Ft. Leonard Wood, MO

• Advanced Map Reading • Intro to GIS & Geospatial Data • Intro to Geospatial Engineering • Interpretation, Analysis & Processing of Remote Sensed Imagery • Factor Overlays • Tactical Decision Aids • Synthesis of Terrain Data • Urban Analysis • Predictive Analysis • 3D Terrain Visualization • Intro to Weather Effects • Military Decision Making Process & Intelligence Preparation of the Environment • Briefing Techniques • Capstone

### Bachelor's of Science - Civil Engineering, Minor - GIS (In Progress), George Mason University, Fairfax, VA

Relevant courses to date: • Intro Engineering • Engineering Graphics • Analytic Geometry & Calculus I • Analytic Geometry & Calculus II • Physics I & Lab • Intro Geospatial Technologies • Intro Geographic Information Systems • Intro Digital Cartography • Intro Computer Programming • Spatial Computing • Computing for Scientists • Elements of Statistics • Quantitative Methods for Geographic Analysis • Human Geography • Major World Regions • Physical Geography • Physical Geology • Web Mapping • Geomatics & Engineering Graphics • Current courses in progress: • Analytic Geometry & Calculus III • Physics II & Lab • Statics • Ecological Applications • Microeconomic Principles

## ADDITIONAL ACHIEVEMENTS

Eagle Scout, Boy Scouts of America

Amelia Earhart Award, Civil Air Patrol

Billy Mitchell Award, Civil Air Patrol

Army Achievement Medal, U.S. Army

Airborne Qualified, U.S. Army