



NIKOLAS HAWLEY, GISP



Fairfax, VA

484-843-4479 | nikolashawley@gmail.com | [LinkedIn](#) | [View Portfolio](#)

SKILLS & KNOWLEDGE

Geospatial Analysis | Imagery Analysis | Cartographic Analysis & Design | QGIS | ArcGIS Desktop (ArcGIS Pro, ArcMap, etc.) | ArcGIS Online/Portal | ERDAS IMAGINE | SOCET GXP | Google Earth | ENVI | Remote View | Python | R | Matlab | Javascript | Leaflet | Mapbox GL | Turf.js | AutoCAD | Civil 3D | Leica TS16, MS50, GNSS/RTK | Creative Problem Solver | Works well Independently or in a team | Quick Learner

EXPERIENCE

Learning Assistant | Department of Geography & Geoinformation Science, College of Science, George Mason University | January 2022 – Present (*Part Time*)

- Assists Professor in the instruction of Introduction to Geographic Information Systems (GIS) for ~20 students through in class assistance and office hours

Recruiting & Membership Officer | American Society of Civil Engineers (ASCE) at George Mason University (GMU) | May 2021 – June 2022 (*Student Organization*)

- Maintained membership information for 150+ student chapter members and lead recruiting events.
- Managed & assisted Project Managers for three ASCE Society-wide Student Competition teams to successfully represent GMU to the greater ASCE community; Each team placed in the 2022 Region 2 West Student Symposium against 14 other regional schools and qualified for Nationals.
- Led UESI Surveying Competition Team of 5 members; Placed 2nd regionally; 3rd nationally overall and 2nd nationally in Field Survey Engineering category.

Lead GIS Specialist | Civil Air Patrol – U.S. Air Force Auxiliary | June 2018 – Present (*Volunteer*)

- Provides GIS analysis, products, and data management in support of Pennsylvania Wing (PAWG) and Civil Air Patrol National Headquarters (CAP-NHQ)
- GIS Subject Matter Expert and ArcGIS Online organization administrator for CAP-NHQ GIS Team in support of CAP Emergency Services, Disaster Relief operations, as well as administrative business intelligence insights through the development of strategic organizational data insights in web-GIS based dashboards, maps, and applications.

Instructor | Civil Air Patrol – U.S. Air Force Auxiliary, Hawk Mountain Ranger School | October 2008 – Present (*Volunteer*)

- Continuously serves as a staff member, instructor, and mentor to lead, train, and develop hundreds of cadets over the past 12 years primarily through the organization's premier national Search and Rescue and Leadership training facility, Hawk Mountain Ranger School (HMRS), and the school's cadet staff training program, resulting in the training of about 10-15 new staff candidates annually.

Geospatial Engineer | U.S. Army | February 2015 – February 2019 (*Active Duty - Full Time*) | February 2019 – February 2022 (*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 special map and geospatial products in support of intelligence analysis for Special Operations Aviation missions over a global area of responsibility.

Field Survey Technician | GORDON Associates | June 2021 – August 2021 (*Full Time*)

- Assisted Survey Party Chief in field surveys for various commercial, federal, and residential projects including site topographic surveys, stream & road alignment profiles & cross-sections, as-built surveys, differential leveling, site stake-out, and boundary & features location.
- Converted hundreds of CAD objects into GIS deliverables for incorporation into National Cemetery Administration GIS applications.

Safety & Quality Assurance/Quality Control Manager | GMU ASCE Concrete Canoe | September 2020 – May 2021 (*Student Organization*)

- Led safety awareness training for ~20 team members on hazards associated with small scale concrete construction.
- Developed a comprehensive health and safety program covering all related aspects for the safe execution of the Concrete Canoe project, as well as a QA/QC plan, including a new Knowledge Management initiative to capture Lessons Learned for future iterations of the project.
- Led After Action Reviews with team members to discuss points for improvement and sustainment regarding the execution of phases of the project.

Geospatial Analyst II | BAE Systems Inc | April 2019 – January 2020 (*Full Time*)

- Provided operational Geospatial Intelligence (GEOINT) analysis support to the National Geospatial-Intelligence Agency (NGA) and Central Intelligence Agency (CIA) defense and intelligence missions including:
- Conducted vulnerability assessments for various US embassies around the globe.
- Produced custom ad-hoc hard and soft copy map and geospatial products ranging from general reference maps to complex technical spatial analysis products incorporating full spectrum GEOINT along with other technical data and intelligence.
- Regularly met and coordinated with various inter-agency partners and customers as the primary Geospatial Analyst representing NGA to understand, develop, and fulfill geospatial requirements for successful mission execution.

EDUCATION & PROFESSIONAL DEVELOPMENT

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

Relevant courses to date: • Elements of Statistics • Analytic Geometry & Calculus I, II, & III • Elementary Differential Equations • University Physics I, II & Lab • General Chemistry for Engineers & Lab • Human Geography • Major World Regions • Physical Geography • Physical Geology • Ecological Applications • Contemporary Microeconomics Principles • Advanced Composition • Intro Geospatial Technologies • Intro GIS • Intro Digital Cartography • Field Mapping Techniques • Intro Computer Programming • Spatial Computing • Computing for Scientists • Quantitative Methods for Geographic Analysis • Web Mapping • Advanced GIS Analysis • Intro Engineering • Engineering Graphics • Geomatics & Engineering Graphics • Statics • Hydraulics • Soil Mechanics • Mechanics of Materials • Water Resources Engineering • Global Environmental Hazards • Learning Assistant Seminar

Certified Geographic Information Systems Professional (GISP), GIS Certification Institute

Certified ArcGIS Desktop Associate, Esri

Certified GEOINT Professional – Geospatial Analysis Proficiency Level II (GPC GA-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

ADDITIONAL ACHIEVEMENTS

J.A. Padgett Memorial Scholarship, ASCE National Capital Section • **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 • **Keystone Boys State**, American Legion