



NIKOLAS HAWLEY, GISP



Fairfax, VA

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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

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, as-built surveys, differential leveling, site stake-out, and boundary & features location.

Converted CAD objects into GIS files and layer deliverables for incorporation in National Cemetery Administration GIS mapping 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 plan 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 as well as sustainment regarding the execution of phases of the project.

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 special map and geospatial products in support of intelligence analysis for Special Operations Aviation missions over a global area of responsibility.

GIS Coordinator | Civil Air Patrol – U.S. Air Force Auxiliary, PA Wing | 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).
- Technical Lead, GIS Subject Matter Expert, and ArcGIS Online organization administrator for CAP-NHQ GIS Team in support of CAP Emergency Services and Disaster Relief operations, including the development of strategic organizational data insights through GIS based dashboards, maps, and web 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 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.

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 a 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: • Intro Engineering • Geomatics & Engineering Graphics • Statics • Ecological Applications • Analytic Geometry & Calculus I, II, & III • Physics I, II & Lab • Microeconomic Principles • 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 • *Currently in Progress:* • Elementary Differential Equations • Hydraulics • Advanced GIS Analysis/Application • Field Mapping Techniques • Advanced Composition

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

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

ADDITIONAL ACHIEVEMENTS

Recruiting & Membership Officer, GMU American Society of Civil Engineers

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