

COLIN TIMOTHY STILES

Email | LinkedIn | Portfolio | Chattanooga, TN

PROFESSIONAL SUMMARY

Natural resource and geospatial technology leader directing the Forest Data & Analysis Unit in the Tennessee Division of Forestry. A decade of experience administering enterprise GIS, automating data pipelines with Python and SQL, and deploying mobile data collection and web GIS for field and incident command teams. Combines hands-on technical skills with experience supervising a technical team, managing grant budgets, and coordinating with state and federal agencies. M.S. in GIS & Geoinformatics; GISP-certified; FAA-certified Remote Pilot.

PROFESSIONAL EXPERIENCE

GIS Manager & Data Scientist | *Tennessee Division of Forestry* September 2025 – Present

- Lead the Division's statewide GIS and data program, one of four units in the Forest Management branch, supporting forest management, wildland fire response, state forest administration, and nursery operations; supervise three direct reports with seven additional staff in the downline.
- Architect and administer the Division's ArcGIS Online infrastructure and databases (300 user accounts), ensuring high availability of spatial data for field staff and incident command teams.
- Lead deployment of mobile data collection solutions for field foresters, improving data accuracy at the source.
- Develop Python pipelines that automate data processing and deliver recurring reports to Division leadership.
- Establish data standards and QA/QC protocols for statewide datasets, including forest inventory, burn history, and land ownership.
- Manage the Unit's budget, including UAS grants and federal Forest Inventory & Analysis (FIA) grant funds; conduct hiring for new Unit members.
- Serve as liaison to state and federal agencies for data sharing and interagency emergency response; work on interagency agreements with TDEC, TWRA, and STS.
- Serve on external committees and working groups, including the SGSF GIS Committee and STS GIS Training Group.

GIS Lead Analyst | *Kimley-Horn & Associates* May 2022 – September 2025

- Served as lead technical GIS analyst, supporting regional GIS work across multidisciplinary engineering practices; led spatial analysis and process automation with ArcGIS Pro, Python, and SQL.
- Administered ArcGIS Enterprise and ArcGIS Online user roles and troubleshoot technical issues to maintain system integrity.
- Built cartographic products and interactive visualizations in the Esri suite, Google Earth Pro, and Microsoft tools for interdisciplinary teams.
- Collected field data with GPS and ArcGIS Online for environmental assessments, including aquatic resource surveys, Phase I & II ESAs, and ecological surveys; secured federal and state environmental permits (Section 404, Section 10, NPDES, Stream Buffer Variances).
- Managed project lifecycles and budgets; wrote proposals and scopes of work to align with client objectives and secure new business.

River Lead & Guide School Trainer | *US National Whitewater Center* March 2019 – October 2023

- Managed Raft Department daily operations and supervised Trip Leads and Raft Guides in a high-volume recreation environment; trained new guides, enforced on-water safety standards, and responded to guest incidents.



Pre-sale Forester & Wildland Firefighter | US Forest Service

- Surveyed tree stands with Trimble GPS to delineate timber unit boundaries and calculate timber metrics; mapped basal area and estimated board feet for timber sale units in ArcGIS Pro.
- Served on-call as a wildland firefighter in wildfire prevention and suppression across Pacific Northwest national forests.

May 2020 – August 2021

Infantry Team Lead (11B) | US Army

- Led infantry teams of up to 10 soldiers holding Secret/Top Secret clearances.
- Conducted field training exercises for overseas deployment readiness; used GPS/GNSS and topographic maps for navigation and search and rescue.

February 2016 – February 2019

EDUCATION

M.S., GIS & Geoinformatics | Colorado School of Mines
4.0 GPA while working full time

May 2024

B.S. Geography & B.A. Environmental Studies | UNC Charlotte
3.98 GPA, Summa Cum Laude

May 2023

CERTIFICATIONS

GIS Professional (GISP), GIS Certification Institute, 2024
FAA Remote Pilot (UAS), 2023
Google Data Analytics Certificate, 2023
GISS-T & Wildland Firefighter Type 2, NWCG, 2020

TECHNICAL SKILLS

GIS & Remote Sensing: Esri Suite (ArcGIS Pro, Online, Enterprise), QGIS, Google Earth Engine, Google Earth Pro, Atlas

Programming & Automation: Python, SQL, Arcade, JavaScript, HTML/CSS

Databases & Data Engineering: PostgreSQL/PostGIS, ETL pipelines, RESTful APIs, data standards, QA/QC

Web Mapping & Visualization: MapLibre, Leaflet, ArcGIS Online, Felt, Blender 3D

Cloud & Systems Administration: Google Cloud, AWS, ArcGIS Online and Enterprise administration

Field Technology: UAS (FAA-certified Remote Pilot), Trimble GPS, GNSS, mobile data collection

Artificial Intelligence: OpenAI ChatGPT and Codex, Google Gemini, Google Vertex AI, Anthropic Claude and Claude Code, LangChain

Leadership & Management: Strategic Planning, Supervision, Budget & Grant Management, Project Management, Technical Training

