

## JUSTIN CAVE, GISP

Phone: (270) 872-6474 | Email: justin.cave7@gmail.com

Portfolio: <https://justincave.github.io/portfolio/> | LinkedIn:

<https://www.linkedin.com/in/justin-cave-gisp> | GitHub: <https://github.com/justincave>

### PROFESSIONAL SUMMARY

Detail-oriented Certified GIS Professional (GISP) with over 5 years of experience in spatial data analysis, geospatial database management, and map production. Proficient in using Esri ArcGIS, QGIS, and Python for data-driven problem-solving. Expertise in managing large datasets, conducting advanced spatial analysis, and automating workflows to enhance productivity. Seeking to leverage technical skills and analytical capabilities in a Senior GIS Analyst role.

### CORE COMPETENCIES

- GIS Software: Esri ArcGIS Desktop, ArcGIS Pro, ArcGIS Online, QGIS, ENVI, Global Mapper
- Spatial Analysis: Buffering, geoprocessing, network analysis, predictive modeling, suitability analysis
- Database Management: PostgreSQL (PostGIS), MySQL, SQL Server, Oracle Spatial
- Programming & Scripting: Python (arcpy, geopandas), R, SQL, JavaScript, Arcade
- Web Mapping & Visualization: ArcGIS Online, Dashboards, Web AppBuilder, Field Maps, Mapbox Studio
- Data Analysis & Processing: BigQuery, Looker Studio, data warehousing, ETL processes
- Field Data Collection: Trimble GPS, Terrasync, Garmin GPS, TopCon Total Station
- Remote Sensing: Change detection, land use classification
- Soft Skills: Communication, problem-solving, teamwork, adaptability, attention to detail

### PROFESSIONAL EXPERIENCE

#### Senior Geospatial Analyst

Connected Nation, Bowling Green, KY (Remote)

March 2024 – Present

- Lead advanced GIS analysis and spatial modeling to support broadband mapping and policy initiatives.
- Manage and process geospatial data from various sources, including satellite imagery and census data.
- Develop and create web maps and interactive dashboards to visualize broadband coverage gaps.
- Automate data processing workflows using Python, increasing efficiency by 30%.

### **Geospatial Programmer/Analyst**

Connected Nation, Bowling Green, KY (Remote)

February 2022 – February 2024

- Designed and implemented Python scripts for automating geospatial data processing and analysis in ArcGIS Pro and QGIS.
- Conducted spatial analysis including buffering, spatial joins, and predictive modeling to identify broadband expansion areas.
- Maintained and updated ArcGIS Online maps, dashboards, and web applications for stakeholders.

### **Geospatial Analyst**

Connected Nation, Bowling Green, KY (Remote)

May 2021 – February 2022

- Executed geoprocessing tasks such as data cleansing, topology corrections, and advanced spatial analyses in ArcGIS Pro.
- Developed maps, charts, and reports for effective broadband data visualization.
- Collaborated with cross-functional teams to provide data-driven insights for infrastructure planning.

### **GIS Research Technician III**

Ingenium Professional Services, Oak Ridge National Lab – Oak Ridge, TN

June 2019 – March 2021

- Analyzed high-resolution satellite imagery for land use and land cover classification.
- Automated data workflows with Python scripts, enhancing project efficiency.
- Collaborated with scientists to train machine learning models for geospatial data classification.

### **Land Survey Technician**

Professional Land Systems, Clinton, TN

May 2018 – May 2019

- Conducted topographic and boundary surveys using Trimble GPS and Total Station equipment.
- Processed survey data and produced maps utilizing ArcGIS Desktop.
- Provided accurate geospatial data for property development and boundary determination.

## **EDUCATION & CERTIFICATIONS**

- B.S. Geology, Western Kentucky University, Bowling Green, KY (2009 – 2014)
- Graduate Geospatial Analysis Certificate, University of Florida, Gainesville, FL (2018 – 2019)

- Geographic Information Systems Professional (GISP), GISCI, Des Plaines, IA (2022 – Current)
- FAA Part 107 Small Unmanned Aircraft Pilot, FAA, Washington, DC (2023 – Current)

## **PROJECTS & ACCOMPLISHMENTS**

- Developed ArcGIS Online web applications and dashboards for monitoring broadband deployment.
- Processed and analyzed large-scale geospatial datasets using Google Cloud BigQuery.
- Automated repetitive tasks through Python scripting, reducing manual workload significantly.
- Conducted remote sensing analyses for land cover classification and environmental assessments.

## **PROFESSIONAL AFFILIATIONS**

- Tennessee Geographic Information Council (TNGIC)
- Cumberland Chapter of URISA
- GISCorps Volunteer
- American Society for Photogrammetry and Remote Sensing (ASPRS)

## **AWARDS & HONORS**

- Eagle Scout Rank, Boy Scouts of America (2007)
- 2000 Miler Award, Appalachian Trail Conservancy (2017)

## **TECHNICAL SKILLS SUMMARY**

- GIS Software: 5+ years of experience with ArcGIS Pro and ArcGIS Online.
- Programming: 4+ years of experience in Python for geospatial analysis.
- Data Visualization: 2+ years of experience using Power BI and Tableau.
- Cloud Technologies: 2+ years of experience using Google Cloud BigQuery for big data processing.