

ANDREW MARTIN

GIS ANALYST / GEOSPATIAL DEVELOPER / CARTOGRAPHER

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📍 Louisville, KY

📄 [Portfolio Website](#)

🌐 [LinkedIn](#)

ABOUT ME

GIS professional with nearly 4 years of experience in indoor mapping, cartographic design, QA, data analysis, and geospatial tool development. Designed and maintained over 1,000 digital indoor maps for healthcare wayfinding. Experienced in the full mapping lifecycle - from CAD plan processing and 3D rendering to navigation, QA, and content management. Developed Python automation tools for mapping workflows and data analysis/monitoring.

PROFESSIONAL EXPERIENCE

Digital Map Designer, Gozio Health

Jul 2022 - Mar 2026

- **Designed and maintained over 1,000 digital 3D indoor maps** for healthcare wayfinding across hospitals, medical offices, parking structures, and multi-building campuses using JOSM and proprietary 3D rendering software
- **Managed the full indoor mapping production lifecycle:** CAD plan conversion with precision scaling, multi-floor .osm architecture, XML theme file maintenance for 3D rendering, navigation paths, POI tagging, and web portal content management
- **Built a multi-client BLE beacon monitoring pipeline** (Python, pandas, REST API, openpyxl) automating battery health reporting across all healthcare clients replacing a manual per-client CSV process with priority-ranked Excel reports featuring voltage statistics, battery replacement projections, and missing beacon alerts
- **Developed mapping automation and QA tools** including OSM coordinate extraction, PNG calibration rotation (2D rotation matrix), POI/elevator CSV export, bulk OSM bounds extraction, and an Android ARGB-to-hex color converter
- **Authored the company's mapper training guide:** a 4-level, 50+ section knowledge base covering JOSM workflows, mapping assets, beacon placement, terminal commands, publishing workflows, and troubleshooting
- **Led end-to-end client projects**, owning all maps across all sites for multiple clients; collaborated with client success, implementation, engineering, product, and content teams
- **Performed QA on all map deliverables**, verifying navigation accuracy, 3D render integrity, and overall design consistency before client-facing deployment

EDUCATION

Bachelor of Science in Applied Geography, Geospatial Technologies

Aug 2018 - Dec 2023

University of Louisville

- **Thesis:** Flood impact, frequency, and hydroclimatological analysis of the July 2022 Eastern Kentucky flood event - spatial analysis and hydrological modeling of Whitesburg, KY
- **Coursework:** Remote Sensing, Spatial Statistics, Web GIS, Cartographic Design, Database Design, Hydrology, Python for GIS

Undergraduate Certificate in Applied Geospatial Technologies

Aug 2018 - Dec 2023

University of Louisville

TECHNICAL SKILLS

- **GIS & Mapping:** ArcGIS Pro, ArcGIS Online, Survey123, StoryMaps, JOSM, Google Earth Pro, Indoor Mapping & Wayfinding Systems
- **Programming:** Python, ArcPy, Shell/Bash, HTML/CSS, SQL, JavaScript, R
- **Data & APIs:** pandas, NumPy, REST APIs, openpyxl, JSON/GeoJSON, XML, File Geodatabases, PostGIS, Georeferencing
- **Tools:** Git, GitHub, Bitbucket, Jira, Confluence, VS Code, Agile/Scrum
- **Design:** Cartographic Design (2D & 3D), Map UI/UX, Data Visualization, CAD Processing
- **Domain:** Healthcare, BLE Beacon / Indoor Positioning, Wayfinding & Navigation, Software Development