

# ALEXANDER SMITH, MS-GIST, JD

Senior GIS Analyst & Programmer

TSSW



## EXPERIENCE

**TerraSystems Southwest, Inc.**

2016–2022

*Senior GIS Analyst & Programmer*

- Serves as TSSW's ArcPy, Python, Javascript expert and programmer.
  - Automates and troubleshoots company-wide project workflows.
  - Trains company personnel on advanced GIS methodology.
- ⇒ ***Next-Generation 9-1-1 Data Improvement Project (NDIP)***
- Edited thousands of road centerlines in 911 project with systemized workflows to maintain address range integrity.
  - Performed detailed, systematized quality control analysis of address data for Next Generation 9-1-1 modernization.
  - Wrote Python scripts to automate key elements of quality assurance workflows for address data analysis.
  - Used experience with property and in-depth familiarity with Arizona geography to convert legal descriptions.
- ⇒ ***Arizona State Land Department Rights-of-Way Conversion (ASLD-ROW)***
- Developed procedures and programs to support complex legal document interpretation and digitizing of thousands of ROWs.
  - Developed complex Python script tools to systematize and speed up right-of-way conversion process.
  - Applied degree in law and prior real estate experience to parse and accurately map voluminous right-of-way documents for digitization process.
  - Provided extensive QA / QC error checking and correction of converted ROWs across the state.
- ⇒ ***Arizona Department of Health Services (AZDHS)***
- Employed custom script tools to geolocate addresses and produce requested cartographic deliverables for daily AZDHS mapping applications.
  - Wrote and tested complex ArcPy and Python scripts to automate daily, time-critical mapping workflows for AZDHS mapping, radically speeding up the map creation process.
  - Researched and quality-assured hundreds of thousand of address records for monthly reporting requirements.

## CONTACT

📞 (520) 360-2253

✉️ [asmith@terrasw.com](mailto:asmith@terrasw.com)

## EDUCATION

**University of Arizona:**

2015, Masters of Science in Geographic Information Systems

2010, Juris Doctor

**Pomona College:**

2003, Bachelors of Arts (History)

## SKILLS

- ESRI ArcGIS Pro / 10.x /
- Python and ArcPy programming
- Cartography and graphic
- Geodatabase design
- 10+ years experience interpreting and mapping property legal descriptions and survey diagrams.
- Real estate research including deeds, chains of title, researching building and construction plans, and experience with easements and eminent domain.
- Member of State Bar of Arizona (currently on inactive