YANETH CASTILLO

GIS ANALYST

EDUCATION

Bachelor of Science, Geoscience, Geography Minor, Kansas State University, 2022

CERTIFICATION AND TRAINING

- ESRI Certifications - Configuring Web Apps Using ArcGIS Web AppBuilder, Visualizing Data Using ArcGIS API for Python, ArcGIS API for Python
- Inner Corridor Technologies – Python for ArcGIS Pro + Writing Scripts to Manipulate GIS Data
- GIS User Certification - Fort Hays State University
- Leadership Studies Certificate - Fort Hays State University

SUMMARY OF QUALIFICATIONS

Results-driven GIS Specialist with expertise in spatial analysis, automation, and data visualization. Extensive experience supporting land development, transportation, and environmental projects through advanced GIS methodologies. Skilled in leveraging ArcGIS Pro, Python scripting, and AGOL to streamline workflows, enhance decision-making, and drive operational efficiency. Adept at developing custom GIS solutions, high-impact maps, and web applications to improve project deliverables and client engagement. Recognized for problem-solving, collaboration, and delivering data-driven insights.

PROJECT EXPERIENCE

Infrastructure & Land Development Projects:

- **MS4 Permitting Research for Special Districts**: Analyzed special district locations to determine compliance with **Municipal Separate Storm Sewer System (MS4)** regulations. Mapped urban areas exceeding 50,000 population based on **TCEQ and USCB census data**.
- **Pasadena Pipeline Project Proposal:** Conducted **spatial analysis to calculate crossings** where City of Pasadena, TX roads intersect known **RRC pipelines**.
- **HCTRA WPT Project - Residential Animated .GIF & StoryMap:** Created an **animated GIF** for visualization, supporting the project's **digital storytelling initiative**.

- **HCMUD No. 530 - General Consultation** – GIS Analyst responsible for Land analysis and exhibits of Water Plant construction.
- **Denton County Outer Loop** - GIS Analyst responsible for primary GIS support to the Transportation group by coordinating with cross-functional teams to develop exhibits highlighting transportation data and strategic solutions to streamline internal workflows. Created a comprehensive automated solution for internal and external use, streamlining data collection, visualizing project-related constraints, and ensuring efficient future development planning in Denton County. Regularly maintained and updated the public web app to support public engagement, offering accessible transportation data and strategic insights.
- **Christie Farm** - GIS analyst responsible for report data confirmation for MUD construction permit to Public Utility Commission for CCN decertification.
- **Rockwood** – GIS Analyst responsible for aerial exports and conversions.

- **Collin County WCID No. 3** – GIS Analyst responsible for Fire Plan Service Area data acquisition and exhibit creation.
- **Kaufman County FWSD No. 4A** – GIS Analyst responsible for Utility Data Database creation.
- **Lancaster MUD No. 1 District Services** – GIS Analyst responsible for Bear Creek Tree Survey data analysis.
- **McKinney Municipal Utility District No. 1 & No. 2**- GIS Analyst responsible for data acquisition and exhibit creation, and report data confirmation for MUD construction permit to Public Utility Commission.
- **Rockwall County MUD No. 6** - GIS Analyst responsible for data acquisition and exhibit creation.
- **Northlake Woodlands Drainage Study** – GIS Analyst responsible for data acquisition and high-resolution Digital Elevation Models (DEMs) creation.
- **North Richland Hills** – GIS Analyst responsible for data acquisition; Parcel and property value analysis; Utility Database, Basemap, and Conveyance map creation.

Feasibility Studies & Proposal Exhibits:

- Developed interactive web maps, feasibility studies, proposal exhibits, and spatial reports for land development and municipal projects.

- Provided data visualization and GIS analysis to support strategic planning for clients across Texas.

- Regularly created and updated GIS databases and public-facing tools to ensure client satisfaction and project transparency.

  - Key projects include: *Rockwall, Bexar, Kaufman, Nevada 300, Seven Springs, Shelton Tract, Crawford Tract – Lancaster, Union Valley Tract 87-Acre, Rio Hondo 1,322 Acres, Cleburne ETJ 502 Acres, Valley View 585, John Day Road 70 Acre Tract, Crandall 144, Eastland Phase 6, Oliver Creek Ranch, Circle S West, M3 Ranch Setback-Partners Commercial Tract, Venetian, Miskimon 344 Acre Tract, Williams Ranch, Maverick Phase 1 Residential, CATDENTON 35 Seven, Inc., Bonds Ranch, Kaufman County FWSD No. 7A, Rolling V Ranch WCID No. 4 & No. 5, Pilot Point Drainage Study, Seven Points Ranch (Westminster), City of Lavon, Champions Crossing, and Farmersville 240 Acres Tract.*

GIS Services for Clients:

- Delivered comprehensive GIS solutions for **McKinney MUD**, **City of Lavon**, and **Christie Farm** among others, including integrating spatial data for compliance, planning, and reporting.

- Created custom basemaps, land-use models, and GIS databases tailored to project-specific needs.

Previous Work Experience:

LJA Engineering, Dallas, TX

GIS Specialist *(January 2024 – Present)*

- Lead GIS analysis and automation for **land development, infrastructure, and transportation** projects, ensuring data integrity and efficiency.
- Develop and maintain **customized web apps, dashboards, and interactive GIS solutions** to enhance client accessibility to geospatial data.

- **Optimized internal workflows** by automating data collection, processing, and analysis, reducing manual labor and improving project turnaround times.
- Provide **spatial modeling and terrain analysis** using **high-resolution DEMs**, LiDAR data, and geospatial computations to support engineering studies.
- Regularly collaborate with multidisciplinary teams to develop **GIS-based feasibility studies, proposal exhibits, and client-facing GIS services.**
- Spearhead the integration of **Python scripting and FME** to automate geospatial processes, ensuring consistency and accuracy across large datasets.
- Conducted **MS4 Permitting Research and Exhibits**, analyzing **special districts** to determine compliance with **Municipal Separate Storm Sewer System (MS4) regulations**. Mapped urban areas exceeding 50,000 population based on **TCEQ and USCB census data**.
- GIS Analyst responsible for all **Denton County Outer Loop (DCOL) requests**, managing district site updates, exhibit creation, and GIS-based decision support.

Landpoint LLC, Fort Worth, Texas - GIS Analyst (September 2022 – January 2024)
- Developed **custom geospatial workflows** to automate data processing, significantly improving mapping accuracy and efficiency.
- Implemented **Python and FME** scripting to streamline **GIS data transformation, spatial analysis, and report generation.**
- Maintained and optimized GIS databases, integrating **surveying, CAD, and remote sensing** datasets for seamless analysis and visualization.
- Created **high-quality cartographic products** for environmental impact studies, land planning, and infrastructure projects.

Halff Associates, Richardson, Texas-GIS Intern (February 2022 - September 2022)
- Assisted in Alexandria, Louisiana Department of Transportation and Development (DOTD) Finished Floor Elevation Extraction, **machine-learning model development** for flood risk assessment by searching for correlations between **LiDAR-based elevation studies**, and other metrics.
- Produced LiDAR-based surfaces and developed machine-learning models for geospatial insights.
- Supported FEMA flood mapping projects by managing large-scale GIS datasets and refining analytical workflows including base-level engineering analysis and map updates.

Fort Hays State University, - GIS Intern (January 2022 - May 2022)
- Conducted **volumetric landfill analysis and seismic reflection studies** for municipal land-use planning.
- Developed GIS-based models to optimize waste management strategies and environmental impact assessments.

TECHNICAL SKILLS

GIS Software & Tools:
- ArcGIS Pro (4.x), ArcGIS Desktop (10.x), ArcGIS Online – Advanced spatial analysis, data visualization, and web GIS applications.
- ArcGIS Story Maps & Experience Builder – Designing interactive, client-facing GIS applications.

Programming & Automation:
- Python (ArcPy, Pandas, NumPy) – Automating GIS workflows, data processing, and spatial modeling.
- SQL – Data querying, manipulation, and GIS database management.

- FME & Power Automate – Automating geospatial data integration and transformation. (

Data Analysis & Visualization:
- **Remote Sensing & LiDAR** – High-resolution terrain analysis and feature extraction.
- **3D Modeling & Cartography** – Utilizing **Blender & Illustrator** for enhanced GIS-based visualization.