

Ana Karen Martinez

anakaren.ca

PROFESSIONAL SUMMARY

Currently pursuing a Bachelor of Applied Technology in Geographic Information Systems (GIS) at the Southern Alberta Institute of Technology with a 4.0 GPA, where I have developed a strong foundation in spatial data analysis, automation, and geospatial application development. With four years of experience in web development, I have honed my skills in problem-solving, detail-oriented analysis, and communication. I am passionate about GIS because I enjoy the process of analyzing, visualizing, and transforming data into meaningful insights.

TECHNICAL SKILLS

Coding Languages: Python, JavaScript, HTML5, CSS, PHP, PostgreSQL, MySQL, FME

Software: ArcGIS Pro, ArcGIS Online, ArcGIS Enterprise, ArcGIS Survey 123, ArcGIS Field Maps, pgAdmin

EDUCATION

Southern Alberta Institute of Technology

Bachelor's of Applied Technology Geographic Information Systems
GPA 4.0/4.0

Calgary, Alberta
September 2024 - present

Simon Fraser University

Bachelor's of Science in Interactive Arts and Technology
Focused on web development comparable to Computer Science

Burnaby, British Columbia
June 2021

PROFESSIONAL EXPERIENCE

Esri Canada

Associate GIS Analyst

Remote/Calgary, Alberta
September 2025 – Present

- Resolved technical issues related to Esri products through phone, email, and video calls, delivering timely, professional customer service while troubleshooting ArcGIS Online, ArcGIS Pro, and ArcGIS Enterprise workflows.
- Supported customers during ArcGIS Field Maps upgrades, diagnosing and resolving technical issues affecting mobile workers, feature layers, and application configuration to ensure minimal operational disruption.
- Investigated ArcGIS Online token behavior to clarify the difference between token expiration and maximum expiration settings, and worked with Esri Support to improve documentation accuracy, helping reduce user confusion and support issues.

City of Calgary

Pathways and Trails Technical Inventory

Calgary, Alberta
May 2025 – August 2025

- Collected and managed field data using ArcGIS Field Maps and ArcGIS Survey123, capturing imagery and asset condition data for over 1100 km of pathways and trails.
- Operated a vehicle-mounted 360° camera system to capture georeferenced video imagery of pathway networks across Calgary, ensuring high-quality data collection for upload and integration into Google Maps.

Sundance College

Full Stack Developer

Calgary, Alberta
November 2022 – July 2024

- Spearheaded the redesign of the checkout page using a combination of JavaScript, CSS, and HTML, resulting in a streamlined and user-friendly purchasing experience.
- Significantly enhanced page loading speeds by optimizing codebase, including the removal of redundant code and unused Google Analytics tools and plugins to ensure a seamless user experience, resulting in reduced bounce rates and higher user engagement.
- Revamped search functionality by implementing keyword-specific searches for titles and tags using JavaScript and PHP for WordPress, improving result accuracy and user experience. Resulted in speed up search queries, faster response times for users reducing irrelevant matches, and improving user satisfaction.

RELATED EXPERIENCE

Wildfire Emergency Response (Capstone Project)

SAIT Calgary, Alberta
January 2025 – present

- Collecting and analyzing image data with ArcGIS online and ArcGIS desktop to assess the conditions of ATV and gravel roads in a First Nation Community. Evaluating pathway conditions to determine if they are viable for emergency evacuations and digitizing road networks for analysis.
- Building and managing a geodatabase (GDB) that integrates data on Alberta's First Nations communities, leveraging orthophotography, satellite imagery, and remote sensing techniques to map human-built and natural features.
- Designing and developing an emergency response dashboard and mobile mapping application, integrating real-time data feeds, GIS layers, RPAS telemetry, and Python scripts to automate data processing and enhance decision-making during wildfire events.
- Documenting workflows and GIS methodologies to facilitate collaboration between technical and non-technical stakeholders, ensuring clear and reproducible decision-making processes.

Research Long Toed Salamander Population (Project)

SAIT Calgary, Alberta
September 2024 – December 2024

[Story map](#)

- Developed and implemented QA/QC checklist to ensure accuracy and integrity of data collected regarding roads, trails, campsites and salamander sightings. Performed regular checks throughout data collection, management, transformation and analysis to maintain a well organized and clean database.
- Designed and developed six detailed maps visualizing salamander population trends, human impact zones, and environmental variables, ensuring clear and effective data representation.
- Performed geospatial data analysis and verification using ArcGIS Pro and ArcGIS Online (AGOL) to assess the impact of human activity on Long-Toed Salamander populations in Banff National Park,

VOLUNTEER EXPERIENCE

Geographic Information Systems (BGIS) Club

Event Coordinator

Calgary, Alberta
September 2024 – April 2025

- Organizing and leading events such as GIS Industry Night, social networking events, and Lunch & Learn sessions, fostering connections between students and GIS professionals.
- Utilizing my design skills to create promotional materials, event posters, and interactive activities with Adobe InDesign, increasing event participation and visibility.