

## **WORK EXPERIENCE**

## Scientific Programmer – Geographic Information Network of Alaska (GINA) | May 2025 - Present

Geospatial analysis + software development using NRT (near-real-time) satellite data. | Python | BASH | JavaScript | ArcGIS | AWS

- Developed a production-grade dashboard for real-time public wildfire monitoring using Python and JavaScript, integrating near-real-time satellite data for rapid situational awareness.
- Engineered a robust data pipeline to support on-demand access and visualization of historical satellite imagery, enhancing data accessibility and geospatial analysis capabilities.
- Built and maintained multiple public-facing ArcGIS applications, enabling broader access to geospatial data for emergency response, research, and public outreach.

## United Nations Research Intern – SPICE Program | June 2023 – Dec 2024

Developing interactive map of US hospitals, filterable by services offered | R | Python

- Leveraged R and Python for data scraping and cleaning from U.S. Census datasets, ensuring data accuracy and completeness.
- Designed an interactive map interface in R Shiny to filter U.S. hospitals by services offered, supporting the UN SPICE Program's research goals.
- Optimized app performance for seamless interaction with over 900,000 records, enhancing user experience and operational efficiency.

## USARPAC DoD SWE Intern | Sep 2022 - Sep 2023

Interactive map of positions for recruitment purposes | Python | R | Excel

• Conducted data analysis and transformation in R and Excel to visualize key metrics for the 9th

1