

HITOMI NAKAMURA

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<https://nakam031.github.io/portfolio/>

EDUCATION

Master of Geographic Information Science

Minor in Management of Technology

University of Minnesota | May 2019

Bachelor of Arts, Geographic Information Science

Minor in Geography

University of Minnesota - Duluth | Dec 2015

EXPERIENCE

Geospatial Support Assistant

Polar Geospatial Center (pgc.umn.edu)

Oct 2016 – present

- Served as a point of contact for over 20 polar scientists to provide geospatial consulting via phone/email.
- Delivered over 100 customized products including orthorectified satellite images, maps, and DEMs to scientists. ArcMap, Python scripts, Adobe Creative Suites, Global Mapper, SQL, Microsoft Office were utilized to accomplish the tasks.
- Created python scripts to automate the process and improve the existing workflow.
- Georeferenced around 80 historical polar maps and cataloged them by using the database.
- Digitized fast ice in entire Antarctica for seal habitat study by utilizing Landsat 7, MODIS, and DigitalGlobe images.
- Contributed to the production of ArcticDEM (arcticdem.org) by using Matlab to QA/QC the DEMs.

Graduate Student Assistant (Translator)

School of Kinesiology, University of Minnesota

Oct 2016 – Jan 2017

- Translated 10 hours long Japanese interview script to English for Dr. Yuhei Inoue's research.

Cartographic Assistant / Technician

University of Minnesota - Duluth

Sep – Dec 2015

- Utilized both ArcMap and Adobe Illustrator to create and design maps for several publications. **Please check portfolio*

GIS Intern

Facilities of Management, City of Duluth

Jun – Aug 2015

- Created custom maps such as Trail system navigation map and Tax forfeit property map by using ArcGIS & Google Earth.
- Attended business meetings and educated how to visualize the problems in maps to non-GIS professionals.

Organizer and Presenter

Arrowhead, University of Minnesota – Duluth

Sep – Dec 2015

- Organized a presentation to provide a different perspective on the history of the atomic bomb dropped on Japan to the students and communities, and to raise the question of justifying nuclear weapon usage.
- Conducted an interview with a Secretary General of Japan Confederation of A- and H-bomb Sufferers Organization, and created a short interview video as a message to the people in the U.S.

PARTICIPATION

Esri UC Student Assistant

Jul 2018

NACIS Annual Meeting, Co-Presenter

Oct 2015

Poster Presentation

Oct 2017

Mapping in Belize (Study Abroad)

May 2015

Humanitarian Crisis Simulation Camp

Sep 2016

MN GIS/LIS Consortium Student Assistant

Oct 2015

SKILLS

ArcGIS Desktop

ArcGIS Pro

ArcGIS API for JavaScript

ArcGIS Server

ArcGIS Online

ArcPy

JavaScript

Python

Adobe Creative Suite

HTML & CSS

PostgreSQL

PostGIS

Bootstrap

JQuery

Microsoft Office

Japanese

Auto CAD

QGIS

GitHub

R

Collector for ArcGIS

Command-Line Interface

PROJECT EXAMPLES

PORTFOLIO: <https://nakam031.github.io/portfolio/>

ArcticDEM Demo Website

Using the ArcGIS Desktop, ArcGIS API for JavaScript, and ArcGIS Server, created several web maps to show the wildfire damage in the Northwest Territories, Canada. By embedding the web maps, created a website to introduce the usage of PGC's Arctic DEM. Hosted the web maps by using ArcGIS Server.

Redesigning A Website

Using HTML, CSS, and JavaScript, redesigned the Lonely Planet's Antarctica website as a final project for the web design class. Used GitHub to store data and host the website.

Poster And Web Creation

Using ArcGIS Desktop and Adobe Creative Suites, produced a poster to introduce the Great East Japan Earthquake. Once the poster was created, migrated the data to website using ArcGIS Online, HTML, CSS, and JavaScript

Change Detection of Area Hit by Tsunami by Using Object Based Image Analysis (OBIA) Method

Using the high-resolution images from DigitalGlobe Foundation, and OBIA method, conducted a change detection research of Iwaki, Fukushima, Japan where it got affected by the Great East Japan Earthquake. Used eCognition Developer to do the OBIA.

Summary Statistics with Multiple Case Fields Tool

Using Python and ArcPy, created a custom tool that calculates summary statistics with multiple case fields. Input is point data and the tool can output multiple summary statistics, such as mean center and median center.

Spatial Database Analysis and Visualization of Wildfire in Nevada

Using PostgreSQL and PostGIS, conducted an analysis of wildfire damage in Nevada from 2000 to 2016. After conducting a spatial analysis, used QGIS to visualize the analysis result.

Story Map of Belize

Using ArcGIS desktop and ArcGIS online, created an interactive Storymap of wildfire distribution in Belize, and relationship of hospitals and settlement distribution in Belize. Downloaded the wildfire data from MODIS and used editing tools to plot the hospital locations and downloaded settlement distribution data from biological-diversity.info.

Maps for Publication

Using ArcGIS Geocoding tool, edit tool, and representation tool, created a map for UMD faculty's publication. Used Adobe Illustrator for detailed cartography.

COURSES

ArcGIS I / ArcGIS II	ArcMap, Pro, Online, ArcPy	GIS Development Practicum	HTML, CSS, JavaScript
Web GIS & Services	JavaScript, Carto, REST, Mapbox, ArcGIS API, AWS, ArcGIS Server, PostgreSQL	Spatial Database Design	PostgreSQL, PostGIS, ArcGIS Server, QGIS, GitHub, AWS, Command-line Interface (CLI)
Advanced Web Design	HTML, CSS, JavaScript, GitHub, Adobe CS	Advanced Remote Sensing	ERDAS Imagine, eCognition Developer, OBIA, Lidar
Statistical Analysis	Excel, R	Advanced Geo-computing	Python, GDAL, ArcPy, CLI
GIS Project Management	Agile, Team Management	Urban GIS and Analysis	ArcMap, ArcGIS API, Python
CADD for Civil Engineers	AutoCAD, Civil 3D	The Web Developer Bootcamp	Frontend, backend (Udemy)

**Please check my portfolio for project examples*