# Megan Gordon, M.A. Mathematics

🗘 MeganGordon | in megangordon000 | 🔇 Website | 🖂 gmail

## OBJECTIVE

Seeking a research position in data analytics and modelling of climate change. Extensive theoretical math background with research experience in climate simulation and social network analysis, and Navy veteran of the Nuclear Power Program.

#### Skills

Technical Skills:	Python: Pandas, NetworkX, Social Network Analysis, Graph data,
	Partial Differential Equations, Atmospheric Modeling, Visualization
	Extensive Graduate Math, Creative problem solving, Strong analytic skills
Some Experience in:	FORTRAN, high performance computing, Linux command terminal, SSH

#### EDUCATION

MA, Mathematics Arizona State University	2022
BS, Mathematics Arizona State University	2020
Nuclear Power School and Prototype Training United States Navy	2011-2017
AMS Short Course Mathematical and Computational Methods for Complex Social Systems	January, 2021
Analysis and PDE Workshop University of Texas, Austin	Summer 2021

## WORK EXPERIENCE

Data Analysis Researcher	August 2020 - August 2022
Arizona State University	Tempe, AZ

Measuring Organizational Impact through Network Connections

- Developed survey methods, analyzed data and developed a dashboard application.
- Used techniques from geometry and topology to analyze the structural properties of data.
- Performed traditional Social Network Analysis in Python using Pandas and NetworkX.
- Generated Exponential Random Graphs to validate analyses in sparse data sets using uncertainty estimations.

March 2019 - August 2019

Tempe, AZ

#### Undergraduate Research Assistant

Arizona State University

Reconstruction of Stratospheric Ozone Dynamics with MPAS and a High Resolution Transport Model on a Rotated Sphere - Forecast real weather patterns and stratospheric and atmospheric ozone dynamics related to the ozone hole using Model for Prediction Across Scales (MPAS), a FORTRAN based parallel computing software.

- Used Fourier Lagrangian transport model to reconstruct stratospheric ozone distribution.
- Initialized a variable resolution grid based on voronoi meshes and hybrid terrain-following isotropic levels.
- Constructed geodesic coordinate system transformation to avoid singularity of spherical coordinate on the pole.

Nuclear Machinist's Mate	2011- 2017
USS Ronald Reagan - United States Navy	Yokosuka, Japan and San Diego, California
– Training Coordinator - Reactor Mechanical Division	February 2017- December 2017
– Job Planner	February 2016- February 2017
– Work Center Supervisor (Maintenance Supervisor)	December 2015- February 2016
Reactor Primary Work Center	

### SERVICE

– Peer Mentorship Program School of Math and Stats, ASU Coordinator (August 2020 - August 2022)

- Respect is a Part of Research Sexual Harassment, Bystander Intervention Training Coordinator (Spring 2021)

- Association for Women in Mathematics Club (AWM) President (2021-2022) Vice President (2020) UG Ambassador (2019)

- Women Veterans Club (WVC) Arizona State University President (2018-2020)