

# GRACE COOPER

Department of Geography, Environment and Society  
University of Minnesota  
420 Blegen Hall  
269 19th Ave S.  
Minneapolis, MN 55455

joh02866@umn.edu  
(651) 324-0616

## Education

---

PhD Student, University of Minnesota, Current

Concentration: Mobility and Food Security

Advisor: Kathryn Grace, Ph.D.

M.S. Geographic Information Science, University of Minnesota, 2017

M.S. Geology, Northern Arizona University, 2012

Concentration: Sedimentology and Stratigraphy

Thesis: Sedimentological analysis of the middle Thumb conglomerate, Miocene Horse Spring Formation, Lake Mead Region, NV

Thesis Advisor: Larry Middleton, Ph.D.

B.A. Geology, University of Minnesota Duluth, 2010

## Posters Accepted for Presentation at Academic Association Meetings

---

(published as Grace Johnson)

**Johnson, G.C.** *ArcGIS Online: Making an Effective Time-Enabled Map*. MN GIS/LIS Consortium Annual Conference, Duluth, MN, 2016.

Mohr, A.R., **Johnson, G.C.**, Cotter, J.F.P., Mahoney, J.B., Syverson, K.M., Ferguson, J.W. *Geochemical analysis of a Glacial Lake Benson varve sequence, west-central Minnesota*. Geological Society of America North-Central/South-Central Joint Sectional Meeting, Branson, MO, 2009.

## Teaching Experience

---

Teaching Assistant, Principles of Cartography, University of Minnesota, Spring 2020

Teaching Assistant, Geography of Health and Healthcare, University of Minnesota, Fall 2019

Teaching Assistant, Advanced GIS, University of Minnesota, Spring 2017

Adjunct Instructor, Geology, Bethel University, Department of Biological Sciences, Fall 2015

Teaching Assistant, Meteorology, University of Minnesota, Fall 2015

Teaching Assistant, Field Geology, NAU, Spring 2012

Teaching Assistant, Sedimentology and Stratigraphy, Fall 2011

Teaching Assistant, Introductory Geology, NAU, Fall 2010, Spring 2010

## Research Experience

---

User Support                    **IPUMS**, University of Minnesota Twin Cities, 2020-present  
*Responsibilities:* Provide data and statistical analysis assistance to students, faculty and staff both in email and through an online forum.

Help Desk Associate            **U-Spatial Help Desk**, University of Minnesota Twin Cities, 2016-2017  
*Responsibilities:* Provided GIS assistance to students, faculty, and staff both in person and by email. This support included answering questions on how to conduct analyses or create maps and in the distribution of ArcGIS software licensure.

Research Cartographer        **Agriculture Book Static Maps**, U-Spatial Project, University of Minnesota Twin Cities, 2016-2017

*Source:* Isett, Christopher, and Stephen Miller. The social history of agriculture: From the origins to the current crisis. Rowman & Littlefield, 2016 (accreditation to Grace Johnson).

*Responsibilities:* Compiled data on historical agricultural boundaries in order to display them at a continental scale with country borders, select administrative boundaries, and major cities. This project required creative cartographic thought in order to display, using only black and white, many different types of data for every continent.

Research Cartographer

**Esri ConnectEd Web Maps**, U-Spatial Project, University of Minnesota Twin Cities, 2016-2017

*Source:* Living Atlas Web Maps

*Responsibilities:* Researched and manipulated data to create and publish global maps of the following topics: Predominant Language by country, Predominant Religion by country, Primary Resources Extracted, Land Cover and Primary Agricultural Use, Changes in Land Use, Historic National Boundaries, Global Energy Production and Reserves, Largest Refugee Populations, Major Empires.

Research Assistant

**Undergraduate Research Opportunities Program (UROP)**, University of Minnesota Duluth, 2008-2010

*Responsibilities:* Mapped the spatial patterns on Venus using Synthetic Aperture Radar Imagery, working under Dr. Vicki Hansen, with the goal to gain understanding of the planet's structural geology.

Research Assistant

**Undergraduate Research Opportunities Program (UROP)**, University of Minnesota Duluth, 2007

*Responsibilities:* Modeled the flow of the Laurentide Ice Sheet, under the advisement of Dr. Howard Mooers, using silicon putty in order to help determine the location of the accumulation zones during the last glacial maximum.

## **Industry Experience**

---

GIS Specialist

**Environmental Resources Management**, Minneapolis, MN, 2017-2019

*Responsibilities:* Provided GIS support to staff on environmental site assessment projects and pipeline routing and construction projects. Managed environmental survey data and construction right-of-way data on linear pipeline projects. Created maps for permit applications and planning.

Geologist

**ConocoPhillips**, Houston, TX, 2013-2015

*Responsibilities:* Exploration for shale oil in the Bighorn Basin, Wyoming. Involved geologic mapping using well log data, cores, and geophysical logs. Geosteered the drilling of horizontal wells in the Eagle Ford Shale, Texas, which required real-time correlation of well log data and cross-sectional analysis.

## **Professional Membership**

---

Association of American Geographers  
MN GIS/LIS Consortium

## **Languages and Skills**

---

Python, R, ArcGIS Pro, ArcGIS Online, Adobe Illustrator, WordPress