

Jacob W. Arndt

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EDUCATION

University of Minnesota, Minneapolis, MN
Master of Geographic Information Science
M.S. Graduate Minor in Computer Science

September 2016 – Present
GPA 3.96

University of Minnesota, Minneapolis, MN
B.S. in Geography
B.A. in Music

September 2012 – May 2016
GPA 3.89 - Dean's List 7 Semesters
Graduated with distinction

WORK EXPERIENCE

U-Spatial, University of Minnesota, Minneapolis, MN
Graduate Research Assistant

Jan 2017 - Present

- Help answer technical questions at the help desk about GIS, remote sensing, and spatial computing
- Web map application and data development for the Minnesota Climate Change Vulnerability Assessment project

NASA Jet Propulsion Laboratory, Pasadena, CA
DEVELOP Student Intern

June 2017 – August 2017

- Conducted remote sensing research in the Health and Air Quality application area for a project that focused on identifying methane emissions patterns from dairy farms in California.

University of Minnesota, Minneapolis, MN
Graduate Research Assistant to Dr. Eric Shook

Jan 2017 - May 2017

- Assisted in the development, design, and implementation of a domain-specific language for Geographic Information Science

University of Minnesota Center for Dendrochronology, Minneapolis, MN
Graduate Research Assistant to Dr. Dan Griffin

May 2016 – Jan 2017

- Analyzed tree rings and climate data
- Participated in field work involving collecting samples and observing forest ecology
- Acted as lab supervisor – supervised and trained undergraduate lab technicians

Polar Geospatial Center, University of Minnesota, St. Paul, MN
Undergraduate Geospatial Support Assistant

Jan. 2015 – Sep. 2016

- Collected and processed imagery
- Designed maps for polar researchers
- Assisted senior staff members with additional tasks

SKILLS

- Software – ArcGIS Desktop, ArcGIS Pro, Erdas Imagine, ENVI
- Programming – Python, Java, TensorFlow
- Web development – Javascript, HTML, CSS, ArcGIS Javascript API
- Machine learning – neural networks, convolutional neural networks, deep learning

PROFESSIONAL AND ACADEMIC EXPERIENCES

- Research funded through the University of Minnesota's Undergraduate Research Opportunities Program that explored the relationship between flight times, wind speed, and climate variability in the Minneapolis-Seattle corridor.
- Winner of the Newton H. Winchell Award for Excellence in Earth Science at the 2016 Winchell Undergraduate Research Symposium.
- 2016 Outstanding Graduating Senior Award in the Department of Geography, Environment, and Society at the University of Minnesota.
- 2016-2017 Secretary of the Geographic Information Science Student Organization at the University of Minnesota.
- 2016 University of Minnesota's Undergraduate Minnesota GIS/LIS Student Scholar Award winner.