Alec Solberg

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Summary

I am a graduate of Northeastern Illinois University with a Bachelor's degree in Earth Science and Master's degree in G&ES. I worked as a Graduate/Teaching Assistant and Research Assistant at Northeastern Illinois University. My advanced knowledge from Geography and GIS mixed with experiences in different disciplines has allowed qualitative and quantitative analyses to be more holistic among teams of different backgrounds I work with. My previous experiences at Jewel Osco, NEIU, and NASA have allowed me to apply my knowledge and build skills with others from many different backgrounds. My education and work experience has developed my ability to be detail-oriented and organized while also meeting deadlines on time. As a critical geographer, I am able to make better choices in GIS and policy development that is more effective and equitable to the social, economical, and environmental paradigms.

Experience

NASA DEVELOP Team Member

NASA - National Aeronautics and Space Administration

Sep 2021 - Apr 2022 (8 months)

-Worked with NASA Earth Observation data while coordinating with NASA staff and federal partner organizations to develop new methods of analyzing evapotranspiration with IPython Notebooks and Google
Earth Engine

-Discussed parameters of the project with partner organizations and peers before conducting research

- Built technical and professional skills with stakeholders through SharePoint and Microsoft Teams

- Performed multiple statistical analyses on NASA data products

-Calculated reference evapotranspiration and actual evapotranspiration values from Ameriflux data tables after
the tables were cleaned

- Developed statistical comparison graphs and databases of evapotranspiration climatologies using the Ameriflux
data and NASA data from their data products using Python Google Earth Engine API

- Assisted with creating ArcGIS Story Maps for organizations to use in communicating our findings to a non-
technical audience

-Validated imagery and statistics with ArcGIS Pro

Research Assistant

Northeastern Illinois University

May 2018 - May 2021 (3 years 1 month)

- All duties were performed in ArcGIS Pro

- Georeferencing 1940-1970 topography maps in TIFF format to parcel and street shapefiles

- Digitized historical light rail from historical topography maps and street intersection information

- Editing and digitizing parcel, subdivisions, and municipality boundary shapefiles to match the districts or

municipal boundaries that were created in 1930-1970
- Developed models for creating seamless polygon zones and zone buffers from tax parcel shapefiles with joined

zone IDs
- Georeferenced and digitized zoning maps

Graduate/Teaching Assistant

Northeastern Illinois University

Jan 2019 - May 2020 (1 year 5 months)
- Assisted over 30 students per classroom with finding resources and organizations for conducting projects
- Assisted students with understanding GIS concepts in assignments or projects using ArcGIS Pro

Geographic Information Systems Analyst

Mint Dispensary

Jun 2019 - Aug 2019 (3 months)
- Analyzed property suitability for building deposit inquiry based on zoning ordinances in a number of cities and towns belonging to Michigan, Nevada, and Massachusetts
- Reverse geocoded property for addresses and prepared web maps for display of suitability results

Merchandiser Receiver

Jewel-Osco

Apr 2018 - Jan 2019 (10 months)

Retail Stock Clerk

Jewel-Osco

Mar 2014 - Jan 2019 (4 years 11 months)

Cashier

Jewel-Osco

Dec 2013 - Mar 2014 (4 months)

Service Clerk

Jewel-Osco

Jul 2011 - Dec 2013 (2 years 6 months)

Education

Northeastern Illinois University

M.A., Geography and Environmental Studies
Jan 2018 - Dec 2022

Northeastern Illinois University

Graduate Certificate, Geographic Information Systems (GIS)

2018 - 2019

Northeastern Illinois University

Bachelor's Degree, Geology/Earth Science, General

2012 - 2017

Skills

Web Map Development • ArcGIS Online • Automation • Python (Programming Language) • Quality
Control • Google Earth Engine • Hydrology • ArcGIS Desktop • Mathematics • Research

Honors & Awards

Cum Laude - Northeastern Illinois University

May 2017

Award of Merit - John Sargon Albazi Research & Creative Activities Student
Symposium

Apr 2019

Award of Merit - John Sargon Albazi Research & Creative Activities Student
Symposium

Apr 2022