

NOAH GANS

22 North Fork Valley Drive, Lander, Wy 82520 • 1 (307) 349-4469 • noahgans00@gmail.com

RELEVANT EXPERIENCE

Backroads

Demand Planning Data Analyst

Berkeley, CA

October 2022 – December 2023

- Identify improvements to our catalog of trips regarding price increase, removal of unsuccessful trips, and conversions of one trip type to another. These bimonthly improvements typically result in 50 to 250 thousand dollars of revenue improvement.
- Built and maintain historical booking dataset and implemented Monte Carlo simulations to predict daily booking distributions. This improves trip assortment accuracy, budgeting, and revenue optimization.
- Function as a data analyst for other departments and provide visualizations and analysis for their projects.

Surdna Foundation Undergraduate Research Fellowship

Using Computer Algorithms to Recommend Infrastructure Development that Reduces Racial Inequality

Brunswick, ME

Summer of 2021

- Conducted literature review of urban sociology, history, and multi-objective spatial optimization.
- Scraped Google Maps, OSM, and other data sources to build dataset of amenities within every Atlanta neighborhood.
- Organized data to measure the accesses to amenities (grocery stores, health care, recreation, ect) and the quality of these amenities within each neighborhood of the city to determine relationships with demographic attributes.

NASA & Jet Propulsion Laboratory

Internship in High Altitude Balloon (HAB) Technologies

Pasadena, CA

Summer of 2020

- Collaborated to develop autonomous & continuous HAB data collection, launch, and recovery systems.
- Modeled high altitude balloon flights using Monte Carlo simulation in Java to predict probable landing location
- Developed ground communication station to interface with Vertical Take-off and Landing Vehicle.

NOLS (National Outdoor Leadership School)

NOLS 2019 Denali Expedition

Denali NP, AK

June & July, 2019

- Summited Denali in Alaska, North America's highest peak on a five-week expedition with 14 other NOLS alumni.

EDUCATION

Bowdoin College

Bachelor of Arts in Computer Science & Sociology (Cum Laude).

Brunswick, ME

May 2022

Relevant Coursework: GIS Applications in Earth and Oceanographic Studies, Social and Economic Networks, Computational Geometry, Artificial Intelligence and Machine Learning, Optimization and Uncertainty, Computational Creativity, Data Structures, Computer Algorithms, Cities and Societies, Human Demography

Computational Geospatial Honors Project

Awarded Matilda White Riley Prize for outstanding Honors Project

September 2021 - May 2022

- Compiled various datasets to construct a digital model of Atlanta, GA including road networks, building geometries, polygon attributes, public transportation networks, and the associated census data.
- Developed custom algorithms to identify boundaries of segregation and simulate the movement of citizens along their probabilistic transportation networks to measure accesses inequality and failures in Atlanta's transit.
- Synthesized computational findings and academic literature into a final report describing the effect of transportation and infrastructure on segregation and the livelihood of Atlanta Residents.

Research Advisor Group

Computer Science Research Group (Eight Students)

September 2021 - May 2022

- Analyzed computer science literature regarding Explainable AI, Topic Modeling, Genetic Algorithms, Neural Networks, and Natural Language Processing.
- Lead presentations or discussed weekly papers with Bowdoin and University of Michigan students and staff.

PROGRAMMING LANGUAGES & INTERESTS

Data Analysis and Visualization Tools: ArcGIS, QGIS, Matplotlib, Pandas/GeoPandas, PyShp, Big Query, PostgreSQL, PostGIS

Programming Languages: Python, C++, C, Java, Node.js, HTML, CSS, Ruby,

Interests: Playing Cards with my Family, Pottery, Roller Blading, Riding Bart, Climbing, Writing, Skiing