

## Skills and Expertise

- Strong verbal communication, ability to distill technical concepts for non-technical stakeholders (5 years)
- Data analytics and visualization - Python, R, SQL, JavaScript, BI software (4 years)
- Geospatial data and mapping - Python, R, Mapbox, ArcGIS (4 years)
- Machine learning and statistics - Python, R (3 years)
- Product management - product roadmaps, agile, design sprints, software requirements, Notion, Miro, Kanban software (1-2 years)

## Work Experience

Senior Product Manager, **BlueConduit** Remote - 40 hrs 05/2021-Present

- Helped establish and refine a product development lifecycle, guide company transition from consulting services to SaaS business model. Managed product engineering team and software development, overseeing \$1.4 million in recognized revenue within the first year of product launch.
- Acted as Project Lead for 6-month [Google.org Fellowship](#), onboarded and guided a team of 10 full-time and part-time product fellows. Fellowship team scoped, designed, validated and launched new consumer-facing web product [LeadOut](#).
- Analyzed national data sets on public water systems, including geographic boundaries, regulatory compliance history and demographics to contextualize the market for water utility analytics. Developed prototypes for interactive mapping applications that would become internal and customer-facing analytics products.

Data Scientist/Analyst, **BlueConduit** Remote - 30 hrs 01/2020 - 05/2021

- Collaborated with machine learning engineers and data scientists to automate core machine learning processes to ensure standardization, reproducibility and scalability of methods, including internal tools in Python for exploratory data analysis and A/B testing for machine learning models.
- Used exploratory data analysis and machine learning to predict and map the locations of lead water service lines in the City of Toledo (Ohio). Predictions, in addition to environmental justice data, informed prioritization of communities with the greatest need.
- Researched techniques to reduce the effects of spatial autocorrelation and other biasing factors that obscure machine learning results and interpretation, including spatial cross validation, spatial entropy and geographically weighted regression.

Research Programmer, **Public Health Dynamics Lab, Univ. of Pittsburgh** Pittsburgh, PA - 40 hrs 09/2019 - 04/2021

- Conducted study of mortality rates for overdose and suicide-related deaths in the US Appalachian region between 1979 and 2015 using novel spatio-temporal clustering algorithm. Study manuscript in pre-publication.
- Produced descriptive statistical analysis of geospatial datasets and health surveys as a use case for a novel statistical downscaling algorithm for small area estimation.
- Generated synthetic datasets to test modules in SpaceState geostatistical software as a part-time subcontractor for [BioMedware, Inc.](#) (50% time).

Data Science Fellow, **US Census Bureau, Civic Digital Fellowship** Suitland, MD - 40 hrs 06/2019 - 08/2019

- The Civic Digital Fellowship is a program designed to match up-and-coming technologists with high-impact government technology roles.
- Developed OpenStreetMap ETL prototype to source geospatial data for use in machine learning applications within the Census Bureau's experimental computing environment. Used machine learning to identify businesses sampled in the US Commodity Flow Survey (CFS) that were least likely to report shipping activity, leading to reduction in sampling error and administrative burden equivalent to \$400,000.

Client Services Intern, **City of Pittsburgh, Innovation and Performance** Pittsburgh, PA - 12 hrs 03/2018 - 04/2019

- Developed business cases, gathered technical requirements and automated data collection for large-scale digital transformations and upgrades such as timekeeping and scheduling and Windows 10 rollout, identifying over \$2 million in potential annual savings. Developed an enterprise-wide software inventory analysis to help inform procurement strategy based on installation and utilization data from over 1,000 on-premises computers.

## Education

**BPhil** in Information Science, **University of Pittsburgh, Sch. of Computing and Information** 08/2015 - 04/2019

Magna Cum Laude - GPA: 3.696 - Economics minor, coursework in data analytics, GIS and public health

- Founder of Design for America, Pittsburgh chapter - organized student group and community-oriented design projects on local issues like lead water contamination and food deserts.
- Founder of H2Info Student Lead Testing Lab - acquired funding, organized volunteers, collected water samples from students and faculty, signed up residents for the City's safe water program and distributed 40+ free water filters to program participants.
- Geoinformatics Laboratory - joined doctoral research group within School of Computing and Information led by Prof. Hassan Karimi while researching and writing for [my baccalaureate thesis](#).