Sara Mattio

Philadelphia, PA, 19106 | ssmattio@gmail.com | 856-313-0681 | linkedin.com/saramattio |
https://github.com/ssmattio

EDUCATION

University of Pennsylvania: *Master of Urban Spatial Analytics (MUSA)*　　Philadelphia - Exp. 2020
Oxford Brookes University: *M.Sc., Urban Planning*　　Oxford, UK - 2016-2017
University of Arizona: *B.S., Regional Development*　　Tucson, AZ - 2011-2014

RELEVANT EXPERIENCE

University of Pennsylvania　　2019 - Present
Master's Student – Concentration: Wharton Real Estate　　Philadelphia
- Enabled data-driven decision making by developing a machine learning model in R to forecast home prices in San Francisco
- Built a time-space model using Poisson Regression to predict where and when EMS calls are likely to take place in Virginia Beach
- Ran statistical regression models in R to identify predictors of accidents related to drunk driving
- Modeled a river system in Indiana to simulate flooding using HEC-RAS and the HEC-GeoRAS extension in ArcGIS

City of Philadelphia – Office of Innovation & Technology　　2017-2020
GIS Analyst (2017-2018), *Lead GIS Analyst* (2018-2020)　　Philadelphia
- Headed the GIS component of the Next Generation 911 (NG911) Project, representing the City of Philadelphia as a member of the Pennsylvania Emergency Management Association (PEMA) GIS Working Group, and determining project best practices for county GIS practitioners
- Created and maintained the city-wide master address point layer and landmarks layer for NG911 using the ArcGIS suite of desktop products
- Maximized efficiency in NG911 workflows by scripting processing in Python
- Queried and analyzed the Employee Active Directory databases using Microsoft SQL Server to join tables and prepare weekly reports of recommendations for clean-up and optimal restructuring of the AD
- Prepared and delivered presentations and training sessions on ArcGIS and in-house mapping applications and tools for City staff and community groups
- Provided support and training in the use of cloud-based GIS programs and their features through the development of an enterprise ArcGIS Online training course

City of Phoenix – Public Works Department　　2015-2016
Volunteer Coordinator　　Phoenix, AZ
- Launched and managed a comprehensive volunteer program for the Public Works Department
- Oversaw the week's events for Compost Week, including securing guest speakers, event logistics, and mobilization of volunteers
- Secured a $5,000 donation to HandsOn Phoenix's Annual Day of Service and headed volunteer activities for over 1,000 volunteers

International Rescue Committee (IRC)　　2013-2014
Education & Employment Intern　　Tucson, AZ
- Developed and managed the center's IDA Loan Program

SKILLS

R, Python, arcpy, SQL, JavaScript, Leaflet, MapBox, Turf, HTML, CSS, ArcGIS, ArcGIS Pro, ArcGIS Online (AGO), GeoDa, CARTO, Power BI, Microsoft Office Suite, Microsoft SQL Server Management Studio