# Branson Fox

# SUMMARY

Experienced data engineer with expertise in GIS, statistics and building big data systems.

# WORK EXPERIENCE

Data Engineer Mar 2022 - Present

NCX (Natural Capital Exchange)

- Built several spatial data pipelines to assess all land in CONUS for forestry development
- Worked closely with data scientists to scale Bayesian pipeline to compute carbon credits
- Lead experimentation to benchmark models and develop new products

# Senior Statistical Data Analyst

Sep 2020 - Mar 2022

Washington University School of Medicine - Division of Infectious Diseases

- Maintained Bayesian model to project COVID-19 hospitalizations statewide
- Learned and applied epidemiological modeling techniques
- Directly advised state, local and private health agencies

#### Lead Data Engineer

Jun 2020 - Jan 2023

Regional Data Alliance @ University of Missouri St. Louis

- Built pipeline to scrape, catalog and distribute regional public datasets
- Managed ongoing rotation of consultants

Data Scientist Dec 2018 - Sep 2020

Washington University School of Medicine - Institute for Public Health

- Implemented private geospatial infrastructure for analysis of sensitive data
- Developed novel methods of spatial interpolation
- Published research on property vacancy and crime

#### EDUCATION

#### Saint Louis University

2016 - 2020

B.A. - Sociology and Demography

Minor - Computational Geospatial Science

# **PUBLICATIONS**

I have published some modest findings in infectious diseases, public health and methods in GIS. See bransonf.com/scholar for an up-to-date list.

### Core Technologies

Languages Python, R, SQL (Postgres, PostGIS, Spark, BigQuery), Javascript, Scala, Bash, Git

Libraries Docker (Compose, Kubernetes), AWS (CDK, Cloudformation), Airflow, GDAL, Databricks

(Spark, MLFlow), Terraform, Metaflow, Sentry

Python Jupyter, FastAPI, Celery, Pandas, Shapely, Numpy, Xarray, Dask