

Highlights

- Startup and Nonprofit experience
- Strong experience with multiple cloud services (AWS, Azure, GCP)
- 7+ years of full stack software and machine learning data engineering

Experience

Radiant Earth | geospatial technology nonprofit

Director of Engineering

3/2023 - Present

- Architected, developed, and launched Source Cooperative - a data publishing utility that allows trusted organizations and individuals to share data products using standard HTTP methods
- Participated in NASA Earth Science Data Systems working groups to develop standards for geospatial machine learning training data and models
- Promoted to PI on \$1.5 million grant from NASA

Engineering Lead / Manager

1/2022 - 2/2023

- Produced an open building footprints machine learning training dataset (RAMP) in partnership with the World Health Organization
- Managed a small team of data engineers creating, cataloging, and publishing geospatial machine learning training datasets

Geospatial Software Engineer

10/2019 - 12/2021

- Awarded \$1.5 million grant from NASA to develop Radiant MLHub - an open repository for geospatial machine learning training data and models
- Architected, developed, and launched Radiant MLHub within 3 months of joining
- Presented at a roundtable on AI and Data at the United Nations in Geneva
- Produced LandCoverNet, the first global benchmark land cover classification machine learning training dataset

Texas State University | department of geography

Graduate Assistant

8/2018 - 5/2019

- Lab Instructor for GEO 2426 (Fundamentals of GIS - 2 Semesters)
 - Mentored students on the basics of doing geographical analysis with GIS tools
 - Prepared weekly labs in ArcMap
- Lab Instructor for GEO 4393C (Geoprogramming - 1 Semester)
 - Instructed students on data structures and Python syntax
 - Taught students how to automate GIS tasks in Python and how to create custom tools in ArcMap
- Research Assistant
 - Developed python applications to enable large scale geographic research

NASA**Image Analyst Intern****6/2017 - 5/2018**

- Added multiple user experience enhancing features to a structure from motion 3D scanning iOS application
- Developed a Python Flask web application with PostgreSQL database to keep track of anomaly detections on the International Space Station and assist in the planning of extravehicular activities
- Assisted in the calibration and recording of tests of the Orion capsule uprighting systems

swipejobs | mobile app startup for temp jobs**Backend Software Engineer****12/2014 - 9/2015**

- Architected and developed the backend software on AWS and led development of the integration of backend and frontend systems
- Developed processes to ingest hundreds of thousands of job listings and algorithmically determine job qualities and geolocation
- Created a job matching engine to match applicants with job listings they qualify for and which fit their preferences

Chaotic Moon Studios | mobile app agency startup**Android Software Engineer****7/2013 - 11/2014**

- Maintained multiple Android applications with 5,000,000+ downloads
- Developed a prototype homescreen replacement for Samsung
- Added cloud storage syncing capability to the enterprise Dell Mobile Workspace Android application
- Developed and published a major Android application ([FXNOW](#)) from scratch within a small team in under half a year
- Created multiple labs projects for PR purposes

Education**BS Geographic Information Science | Texas State University****(MORE EXPERIENCE LISTED ON [LINKEDIN](#))**