

SUMMARY

Innovative **Geospatial Data Engineer** with skills in geospatial data processing and analysis. Committed to driving data-informed decision-making to create profit and impact in the fields of **renewable energy** and **ESG**.

EDUCATION

- **University of Wisconsin-Madison, WI, USA** **Madison, WI**
Master of Geographic Information System & Cartography; GPA: 3.8/4.0 *Sep 2019 – Dec 2020*
Courses: Advanced Quantitative Method, Geospatial Database Design and Development, Geocomputing & Big Data Analytics

SKILLS

- **Programming:** Python, JavaScript, SQL, R, SQL (PostgreSQL and PostGIS)
- **Geospatial Data Science:** Machine learning for geospatial applications, predictive modeling, geoprocessing, Lidar data classification and segmentation, drone technologies; Proficient in GIS Esri ArcGIS ecosystem
- **Business Development:** Technology communication, market analysis, development of socially responsible solutions

WORK EXPERIENCE

- **Blue Marble Geographics** **Hallowell, ME**
GIS Application Specialist *Mar 2022 – Present*
 - **Consults with over 300 clients to solve geospatial problems:** achieved customers' goal from across engineering, environmental services, surveying, gas & oil and utility, by using various GIS technologies.
 - **Leads the development of GIS scripting courses:** designs and leads GIS training, contributing 40% of the department's revenue.
 - **Delivered talks to showcase geospatial solutions:** represents the company as Technical professional at trade show.
- **Cyclomedia** **Middleton, WI**
LiDAR Data Analyst *Jun 2021 – Dec 2021*
 - **Conducted utility LiDAR point cloud extraction and analysis:** created a proprietary digital asset library for transportation, telecommunication, and gas industries.
 - **Optimized project process flow:** contributed to a \$5 million increase in utility and communication projects.
- **University of Wisconsin, Madison** **Madison, WI**
Research Assistant at The Geospatial Data Science (GeoDS) Lab *Jan 2020 – Mar 2021*
 - **Co-authored papers published in international scientific journals:** collaborating with PhD to publish research papers in Computers, Environment and Urban Systems, focusing on computer-based urban systems research, "[Places for Play: Understanding Human Perception of Playability in Cities Using Street View Images and Deep Learning](#)" (2021).
 - **Engineered data pipelines:** compiled the environmental EPA's smart location datasets and demographic datasets.
 - **Developed a custom Python spatial analysis function:** analyzed data over 100,000 Google Street View images to discern spatial patterns in Python using Matplotlib, Shapely and GeoPandas.

GIS Metadata Technician at The Arthur H. Robinson Map Library *Sep 2019 – Sep 2020*

 - **Managed Geospatial Data Repository for GeoData@Wisconsin:** Administered 700 geodatabases and curated archival metadata, ensuring data integrity and accessibility to enhance the discoverability of geospatial resources.
 - **Optimized Data Retrieval:** developed a Python pipeline and leveraged the Esri ecosystem (ArcCatalog) and ArcPy to automate archival Lidar and aerial imagery to improve workflow productivity.
- **Flow Inc.** **Taipei, Taiwan**
Business Development Intern *Jan 2019 – Jul 2019*
 - **Participated in customer communication and AI business expansion:** empowered individuals with disabilities through innovative technology solutions.
 - **Enhanced the AI annotation market reach:** gained hands-on experience in identifying market needs and developing innovative solutions.