Zachary Puckett

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WHO I AM

I use GIS to drive equitable land use planning, with a proven record of timely, effective collaboration. I've led projects involving satellite imagery, spectral analysis (e.g., NDVI), and geospatial modeling to analyze transportation access, urban development, and ecological risk zones. Recently, I partnered with House Our Neighbors to assess underutilized land for social housing. I'm looking to join a team where I can grow, take on new challenges, and use GIS to drive equitable, data-informed change.

EDUCATION

University of Washington – Seattle, WA
Bachelor of Arts in Geographic Data Science, Minor in Data Science
Dean's List | Expected June 2025

Relevant Coursework: GIS using ESRI Shapefiles & GeoJSON, Remote Sensing (Optical & SAR via Google Earth Engine; NDVI, Spectral & Radiometric Analysis), Data Wrangling, Machine Learning, Data Visualization, Intermediate Programming, Statistical Methods, UI Design
Interests: Equitable Land Use Planning, Urban Spatial Analysis, Data Visualization

RELEVANT EXPERIENCE

Intern, Research Department, Productions Plus, *Anne Arbor, MI (Remote)*
- Assist in the development, collection, and analysis of auto show and event data to generate reports on improvements and suggestions for Lexus, Toyota and Chevrolet.
- Participate in bi-weekly meetings with the entire Productions Plus automotive team.

Capstone, Parcel Analysis for Social Housing Suitability, Univeristy of Washington
- Ongoing partnership with House Our Neighbours to identify suitable parcels of underutilized land for social housing development.
- Multi-layer geoprocessing in ArcGIS Pro to calculate walk, bike, and transit accessibility scores; SQL-based queries to identify underutilized parcels; cleaning and standardizing open-source spatial data; ArcGIS Storymaps for interactive, client-facing deliverable.

Remote Sensing for Vegetation Change Detection in Manhattan with GEE, University of Washington
- Used Sentinel-2 satellite imagery and Google Earth Engine to monitor seasonal vegetation change in Manhattan (2024).
- Calculated NDVI across monthly composites to analyze spatial-temporal patterns.

Machine Learning, Kaggle Competition, University of Washington
- Developed a random forest model to predict edX course completion using student engagement data; optimised performance with GridSearchCV, reaching 97.75% test accuracy.
- Placed 6th out of 125 competitors, demonstrating robust data pipeline design and tuning.

Geospatial Analysis of Log Jam Analysis in the Upper Columbia Region, University of Washington
- Analyzed log jam distribution across 8 river systems using Google Earth Engine to identify restoration zones for the Upper Columbia Salmon Recovery Board.
- Identified spatial correlation with dams and urban development using visual inspection and environmental datasets.

QUALIFICATIONS

Programming: Python (Pandas/GeoPandas, NumPy, matplotlib, Seaborn), R (tidyverse, tidymodels, dplyr, statsr, janitor, shiny), ArcGIS (Pro, Online), Java, SQL, HTML, CSS, Qualtrics.

Proficient in Data Collection/Analysis/Visualization: Extensive professional and academic experience collecting survey data, interpreting qualitative/quantitative data, and creating data visualizations using Python, R, ArcGIS, and Qualtrics.

Strong user-centered design skills with demonstrated experience in prototyping low - high fidelity, wireframing, user personas, Figma, Adobe Photoshop, Qualtrics, Squarespace, and Canva.

Proven teamwork and project management skills, communication skills, and effective leadership exemplified through both academic and professional experiences.

WORK EXPERIENCE

Intern, Research Department, Productions Plus *(Remote)*
June 2024 - Current
- Data collection, survey development, and insights analysis for major automotive brands, including Lexus, Toyota, and Chevrolet.

Host, Eureka!, *Seattle, WA*
April 2023 - Current
- Provide excellent customer service and smooth guest flow through team coordination, maintain waitlist, and expedite food.

Team Member, Chipotle, *Seattle, WA*
June 2021 - December 2022
- Coordinate team to efficiently manage high guest traffic.

Teacher Assistant, Temple Beth Am, *Seattle, WA*
September 2016 - June 2021
- Prepared bulletin boards, classroom materials and student portfolios.
- Collaborated with teachers to provide instruction and devise lessons while attending workshops and seminars.