

# Erma Swartz

NY

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## WEBSITES, PORTFOLIOS, PROFILES

- [Linkedin.com/in/erma-swartz-174939184/](https://www.linkedin.com/in/erma-swartz-174939184/)
- [Github.com/ErmaSwartz](https://github.com/ErmaSwartz)

## SUMMARY

Urban planning graduate student with experience in land use, zoning, and infrastructure planning supported by spatial and quantitative analysis. Skilled in GIS, technical reporting, and collaborative project work, delivering accurate, deadline-driven planning solutions.

## EDUCATION

### **Columbia University - New York, NY | Master of Science**

Urban Planning, Expected in 05/2026

### **University of California - Berkeley, CA | Certificate**

Data Analysis and Visualization, 05/2021

### **University of Colorado - Boulder, CO | Bachelor of Arts**

International Affairs, 08/2018

## SKILLS

ArcGIS (mapping and spatial analysis)

SketchUp

Python (data analysis)

Statistical and spatial data analysis

Zoning analysis

Environmental review

Technical report writing

Rhino

Adobe Creative Suite

Excel

Land use planning

Site planning

Transportation planning

Data visualization

## WORK HISTORY

### **DEPARTMENTAL RESEARCH ASSISTANT | 05/2025 to Current**

#### **Columbia University - New York, NY**

- Collected, cleaned, and analyzed environmental field data from a team-developed sensor prototype, compiling observational and spatial datasets to support research and reporting.
- Created detailed 3D models in Rhino to support spatial analysis and technical project documentation.
- Conducted spatial and quantitative analysis of demographic and environmental data to assess infrastructure access and identify patterns relevant to land use and urban planning contexts.
- Cleaned, structured, and analyzed large spatial and tabular datasets to support technical reports, maps, and project documentation while maintaining data accuracy and quality control standards.

### **POLITICAL STRATEGIST AND DATA CONSULTANT | 01/2024 to 01/2025**

#### **Mandate Media - Portland, OR**

- Applied data analysis and Python-based automation tools to streamline reporting processes and improve the efficiency and accuracy of client deliverables.
- Developed data visualizations—including tables, charts, dashboards, and analytical summaries—to communicate quantitative findings clearly to technical and non-technical stakeholders while managing multiple project timelines.

### **POLICY AND DATA ANALYST | 01/2023 to 10/2023**

#### **Retail Energy Advancement League - Denver, CO**

- Conducted energy market, regulatory, and emissions analysis and prepared technical memoranda, reports, and presentation materials to support infrastructure planning and long-term decarbonization strategies.
- Synthesized policy research and stakeholder input into clear written documentation and briefing materials to communicate findings and recommendations to diverse audiences.

## PROJECTS

**Graduate Studio – Comprehensive Land Use & Zoning Plan (2026)**

- Contributed to the preparation of a city-scale land use plan integrating zoning districts, development standards, infrastructure capacity, and long-term growth strategy.
- Conducted site suitability and development capacity analysis using GIS, spatial analysis, and regulatory review.
- Prepared land use maps, zoning diagrams, and written planning documentation to support proposed development recommendations.

**Site Planning & Infrastructure Assessment Projects**

- Evaluated site constraints, including topography, flood risk, transportation access, utilities, and zoning limitations, to assess development feasibility.
- Produced GIS-based maps, infrastructure diagrams, and planning memoranda to support site planning and redevelopment proposals.

**Spatial Infrastructure & Demographic Analysis – New York City**

- Performed GIS-based analysis of demographic and environmental datasets to assess infrastructure access and spatial disparities across neighborhoods.
- Developed data visualizations and technical summaries to support planning-related research and project documentation.