Kaia (Kaiqi) Hu

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EDUCATION

Carnegie Mellon University, Heinz College of Information Systems and Public Policy Pittsburgh, PA M.S. in Public Policy & Management, Data Analytics August 2023 – May 2025

- Cumulative GPA: 3.82/4.0 (Distinction)
- **Research Focus**: Energy & Transportation Planning Policy

University of California, Berkeley

B.A. in Data Science Minor in Geospatial Information Science and Technology (GIST)

Cumulative GPA: 3.74/4.0

SKILLS

- Technical: Excel, Python, PostgreSQL, Power BI, Tableau, MapReduce, GeoPandas, ArcGIS, R, Git, MongoDB, PostGIS, NetworkX, Web Scraping, Data Studio, Java.
- Languages: English and Mandarin (bilingual proficiency).
- Courses: Energy Policy and Economics; Energy Demand & Utilization; US Energy and Climate Policy; Policy Analysis in Practice; Growth and Intelligent Transportation Systems; Data, Inference, and Decisions; Intro to Database Management; GIS & Environmental Science; Optimization; Econometrics; Telling Stories with Data; Spatial Data Science: Intermediate Economics Analysis.

PROFESSIONAL EXPERIENCE

Strategen Consulting

Jr. Analvst Intern

- Conducted pollution impact analysis using ArcGIS on disadvantaged communities near electricity power peaker plants in the US, which was published as major evidence in the company's industry report.
- Created a capacity prediction model to simulate and measure NYC rooftop solar PV's technical potential using GeoPanda and ArcGIS.
- Facilitated workforce meetings by documenting legislative minutes and assisting members in accessing comprehensive meeting materials to streamline collaboration and efficiency.
- Developed Worker Utilization dashboards on Power BI that sync with Mavenlink API to provide real-time insights for project managers.

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- ESG Mapping & Data Science Associate May 2024 – August 2024 Mapped hotel and sustainability certification frameworks, including ESRS, LEED, and Green Globes, to the company's hotel evaluation metrics and criteria, improving hotel user questionnaire filling rate by over 20%.
- Developed a new SDG insight report tool on Tableau that generates customized UN SDG alignment for hotels to inform their strategic priorities regarding sustainability and revenue.

Bay Area Environmentally Aware Consulting Network (BEACN)

Senior Project Manager

- Led the team to perform market and policy mapping of the tire industry and manufacturer behavior prediction to help the client SFEI monitor tire wear road runoff and tribal community impact analysis.
- Led a GIS subproject to identify optimal water quality testing sites in the Klamath Watershed using Caltrans road data. •
- Presented project findings to clients, earning recognition in the industry report and invitations to present before multiple state agencies, including the CA Dept. of Toxic Substances Control and CalEPA.
- Initiated conversations with community and tribal nation representatives, including Corrina Gould, Chair of the • Confederated Villages of Lisjan (Ohlone), on environmental sovereignty and future policy designs.

ACADEMIC PROJECTS

Conduct Energy Demand Studies on Introducing Regenerative Braking to Pittsburgh's Light Rail Pittsburgh, PA Research Project for Energy Demand & Utilization Course January 2025 – March 2025

- Calculated Levelized Cost of Energy (LCOE) to assess economic feasibility and conducted policy research to develop strategic funding recommendations.
- Presented the research poster at a college-wide poster session and a seminar, engaging with attendees to discuss key findings and implications.

Transition Plan for Mon Valley Communities with US Steel Facilities Consulting Study for Steel Rivers Council of Governments

Pittsburgh, PA January 2025 – May 2025

Berkeley, CA August 2019 – May 2023

Remote

January 2022 – December 2022

Remote

Berkeley, CA

September 2020 – May 2023

- Managed a team of 8 in conducting research and developing over 10 redevelopment strategies for three US Steel sites near decommissioning; presented midterm deliverables before regional development agencies and city councils.
- Led strategy research on converting brownfields into data centers, evaluating project financing options, tax credits, and relevant subsidies to optimize redevelopment opportunities.

Cost-Benefit Analysis of Maintaining Pittsburgh Regional Transit's Silver Line Light RailPittsburgh, PAConsulting Study for Mobilify Southwestern PAJanuary 2025 – May 2025

• Analyzed stakeholders' economic and social impact with suburban southern Allegheny County service changes.

• Performed cost-benefit analysis of proposed alternatives, integrating community needs through geospatial data. **Drafted a Bridge Maintenance & Inspection Plan for Pittsburgh (Case Studies, Policy Analysis)** Pittsburgh, PA *Research for Growth and Intelligent Transportation Systems Course* December 2023

- Developed policy recommendations and technology solutions to enhance Pittsburgh's bridge conditions.
- Conducted traffic demand management (TDM) research to curate effective traffic strategies for anticipated bridge closures.
- Drafted a proposal using a specific Poor-Rated bridge in Pittsburgh to demonstrate the application of the proposed methodology.

Predict Household Energy Insecurity in California (EDA, Data Visualization)Berkeley, CAUndergraduate Course ResearchSeptember 2022 – December 2022

• Designed an Energy Insecurity prediction model with the Residential Energy Consumption Survey dataset using logistic regression models and ensemble methods that reached an accuracy of 85%.

• Applied model on cleaned CA census tract data and visualized findings through charts and GIS maps.

Predict Environmental Injustice Using Geospatial Embeddings (Regression Model, Visualization)Berkeley, CACourse ResearchSeptember 2022 – December 2022

- Utilized multiple modeling methods, including Bayesian Ridge regression, Lasso Regression, and MPL Regressor on EJScreen data and identified the best-performing model to predict EPA's Environmental Justice Index.
- Applied the model on high-coverage geospatial embedding data to visualize locations with potential Environmental Justice concerns.

PROFESSIONAL CREDENTIALS

Sustainability Excellence Associate - Green Business Certification Inc.	2024
SCET Certificate in Entrepreneurship & Technology - UC Berkeley College of Engineering	2023