Kaia (Kaiqi) Hu

(415) 961-8127 • kaiahu@cmu.edu • linkedin.com/in/kaia-hu-97a09a197 • www.kaia-hu.com

EDUCATION

Carnegie Mellon University, Heinz College of Information Systems and Public Policy

Pittsburgh, PA

M.S. in Public Policy & Management, Data Analytics

Expected May 2025

Cumulative GPA: 3.74/4.0

Research Focus: Energy & Transportation Planning Policy

University of California, Berkeley

Berkeley, CA

B.A. in Data Science

August 2019 – May 2023

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

Alō Index Remote

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.

Strategen Consulting

Jr. Analyst Intern

January 2022 – December 2022

- 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 Mayenlink API to provide real-time insights for project managers.

Cost-Benefit Analysis of Maintaining Pittsburgh Regional Transit's Silver Line Light Rail

Pittsburgh, PA

Consulting Study for Mobilify Southwestern PA

January 2025 – Now

- Managed early-stage project scoping, timeline development, and team responsibility allocation.
- Analyzed stakeholders' economic and social impact with service changes in suburban southern Allegheny County.

Bay Area Environmentally Aware Consulting Network (BEACN)

Berkeley, CA

Senior Project Manager

September 2020 – May 2023

- 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.

Transition Plan for Mon Valley Communities with US Steel Facilities

Pittsburgh, PA

Consulting Study for Steel Rivers Council of Governments

January 2025 – Now

- Conducted research on brownfield project case studies to prepare commercial redevelopment proposals for the Clairton Coke Works site.
- Conducted SWOT analysis on different redevelopment strategies to draft final recommendations.

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.

Drafted a Bridge Maintenance & Inspection Plan for Pittsburgh (Case Studies, Policy Analysis)

Research for Growth and Intelligent Transportation Systems Course

Pittsburgh, PA

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.

Assess Bike Sharing Network and First- & Last-mile Transit in Pittsburgh (Network Analysis)Pittsburgh, PA

January 2024 – Now

- Created microtransit network models for central Pittsburgh with GeoPandas and NetworkX; conducted network analysis on POGOH bike share stations, including degree, centrality, and clustering coefficients.
- Conducted surveys with bike share service users to understand their commuting experience and preferences.

Predict Household Energy Insecurity in California (EDA, Data Visualization)

Berkeley, CA

2024

2023

- Undergraduate Course Research
 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.

PROFESSIONAL CREDENTIALS

Sustainability Excellence Associate - Green Business Certification Inc.

SCET Certificate in Entrepreneurship & Technology - UC Berkeley College of Engineering