Karl Tacheron

Curriculum Vitae

Design Building, University of Massachusetts
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Research Interests

Qualitative and quantitative research, multiuse paths, community organizing in planning

Education

- University of Massachusetts, Amherst, Masters in Regional Planning candidate, 2023–present
- The University of New Mexico, Geographic Information Systems Certificate and non-matriculated graduate coursework, 2017-2018
- Massachusetts College of Art, BFA Photography, 2011

Research Experience

- Impact 2050 Assistantship, Spring 2025. Regional planner outreach for an EPA Climate Pollution Reduction Grant assistantship (more information at cprgct.org).
- Vulnerability mapping on SEEDs Grant research project, Advisor Seda Salap-Ayca, 2021-2022. Wrote Jupyter notebooks of flood vulnerability mapping using variety of scientific Python tools (Numpy, Scipy, MiniSom, Matplotlib).

Conferences and workshops

- South Central Connecticut Climate Action Forum – Focus group facilitator and scribe, October 2024
- "IRB Party" – Designed and led informational workshop for Institutional Review Board applications, March 2023
- American Association of Geographers 2021 Graduate Honors Competition – Poster presentation, March 2021
- Massachusetts GIS Day 2021 – "Introduction to Web Scraping with Python" Workshop, December 2021
- Massachusetts GIS Day 2020 – Presentation of "Methods for creating pedestrian walksheds with Python," December 2020

Teaching Assistant Roles

- ECO637 Spatial Analysis in R, UMass Amherst, Spring 2024 (James Tsalah). Graded assignments, assisted students with geospatial R programming in office hours and weekly labs.

- REGIONPL 525 Intro to GIS, UMass Amherst, Spring 2024 (Prof. Peter Dunn). Graded assignments and labs, assisted students during office hours.

- GEOG102 Human Geography, UMass Amherst, Spring and Fall 2023 (2 semesters, Prof. Eric Thomas). Taught 3 discussion group sections weekly, graded 75 assignments/week.

- GEOG693 GIS Programming, UMass Amherst, Fall 2021 and Fall 2022 (Prof. Seda Salap-Ayca). Assisted students on typical introductory-level Python programming.

- GEOG697 Spatial Decision Making, UMass Amherst, Spring 2022 (Prof. Seda Salap-Ayca). Assisted students on introductory Python and decision-making algorithms.

- Digital Photography, Massachusetts College of Art and Design, Fall 2011 (instructor S. Billie Mandle). Advised students on printing digital photographs on inkjet printers using Photoshop and ImagePrint.

Honors and Awards

- American Association of Geographers 2021 Graduate Honors Competition – Honorable Mention, March 2021

- Massachusetts GIS Day - Grad Slam - 2nd Place, December 2020

- NMCounts 2020 Census Complete Count outreach project grant, March 2020

- Massachusetts College of Art and Design – Faculty Selection for New England Photography Programs Group Show, May 2011

- Massachusetts College of Art and Design - Senior Thesis Faculty Selection, May 2011

Skills and Experience

- Python scientific programming for GIS: 7 years of regular use across research and coursework. Strong skills with scientific packages and data tools: R, Numpy, Pandas, Matplotlib, NetworkX. Use of major IDEs and environments: Jupyter Notebooks/Lab, Spyder, Anacondas.

- ArcGIS Pro/Desktop and ArcPy: 3 graduate level courses (2018, 2021), 3 semesters TAing GIS courses (2021-22), ESRI certificate course through University of New Mexico Continuing Education (2017).

- Large document typesetting: 8 years experience using LaTeX, InDesign, and Python+Jinja to produce large rich-text documents with citation and cross-reference management under version control. Resaerch applications include using structured data (edited in e.g. Google Sheets) to automatically render hard-copy documents of any length. Relevant teaching applications include syllabi production, automated gradesheets, and individualized test materials.

- Web design and maintenance: 10 years as a website developer, multiple administrative positions writing and maintaining web content.

- Qualitative research: Qualitative research tagging and analysis of semi-structured survey data, ongoing Masters Thesis work using qualitative research

- Teaching: 4 semesters assisting students with GIS tools, 2 semesters teaching weekly discussion sections.

- Event organization and outreach for public participation: Contract work on $500,000 United Way project organizing statewide events through Summer 2018, contact database management, mass mailing 20,000 recipients and all event data.

Memberships and Affiliations

- American Association of Geographers, 2020-2022

- American Planning Association, 2023-present