

Carol Tsai

carol.tsai0224@gmail.com

(949)-599-6063

Philadelphia, PA

[linkedin.com/in/carol-tsai](https://www.linkedin.com/in/carol-tsai)

carol-tsai.github.io/developer-portfolio

Full-stack web developer with a background in GIS and Environmental Sciences. Trained at the University of Pennsylvania full-stack web development certificate program. Innovative problem-solver passionate about developing apps; focused on mobile-first design and development. Strengths in creativity, teamwork, and building projects from ideation to execution.

EXPERIENCE

GIS Analyst

Apex Systems

Sunnyvale, CA

Jun 2020 - Feb 2022

- Transitioned map address format to data driven templates as JSON files for 150+ countries and territories
- Reduced errors through automation, documentation, and standardized quality control over a wide range of data size, quality, and geography
- Resolved map formatting errors internationally through address templates

Student Technology Consultant

UC Berkeley Student Technology Services

Berkeley, CA

Aug 2019 - May 2020

- Resolved 20% of router setup, registration, and troubleshooting tickets for university apartment residents
- Provided software and hardware support for students via walk-in appointments, emails, and phone
- Resolved first level security incidents including virus/malware removal and data recovery

Site Solutions Intern

Ramboll

Emeryville, CA

Jun 2019 - Aug 2019

- Prepared figures for groundwater modeling reports using ArcMap, ArcPro, and Python
- Conducted quality assurance and quality control for groundwater data
- Complied and verified 500+ groundwater elevation targets in a Microsoft SQL database

PROJECTS

Just Another Text Editor — Text Editor Progressive Web App

May 2022 | <https://secure-sands-75999.herokuapp.com/> | <https://github.com/carol-tsai/just-another-text-editor>

Tools: NodeJS, Javascript, PWA, Heroku, Service Worker

TravelCheck — Travel Safety App

March 2022 | <https://qkeddy.github.io/travelcheck/> | <https://github.com/qkeddy/travelcheck>

Tools: Javascript, HTML, CSS, MaterialUI, Moment, Open Disease API, Travel Advisory API

Weather Dashboard — Weather Forecast App

March 2022 | <https://carol-tsai.github.io/weather-dashboard/> | <https://github.com/carol-tsai/weather-dashboard>

Tools: Javascript, HTML, CSS, Open Weather API

Categorizing River Networks into Functional Process Zones Using Geographic Information Systems

May 2020

Senior thesis which utilized the Riverine Ecosystem Synthesis concept to create a patch-dynamics model of the Salmon Creek Watershed using GIS data. Results of this model and literature review were presented in the Environmental Sciences symposium and as a written thesis.

Tools: R, ArgGIS, Riverine Ecosystem Synthesis

TECHNICAL SKILLS

Programming Languages: Javascript, Python, Java, HTML, CSS, JSON, SQL, C#

Databases: MongoDB, MySQL, DynamoDB, GraphQL, Postgres

Tools: Heroku, NodeJS, ExpressJS, ReactJS, jQuery, Bootstrap, Handlebars, OOP, PWA, Wordpress, Webpack, ESLint, Jest, AWS, JWT, REST, Spring, Spring Boot, Thymeleaf

GIS: ArgGIS, ENVI, R, Google Earth Engine, Remote Sensing, Drone flying

EDUCATION

University of Pennsylvania

Full-Stack Web Development Certificate

Graduated May 2022

GPA 4.0

University of California, Berkeley

B.S. Environmental Sciences

Minor in Geospatial Information Science and Technology

Graduated May 2020

GPA 3.7