

Jake Pfaffenroth

hello@jakepfaf.dev ❖ jakepfaf.dev ❖ github.com/jakepfaffenroth ❖ (262) 365-3605

EDUCATION

Ph.D., Anthropology

University of Wisconsin - Madison

June 2018

Madison, WI

SKILLS

Javascript, Vue, HTML5, CSS3, Node.js, Express, PostgreSQL, MongoDB, Git

RELEVANT EXPERIENCE

Museum and Preservation Specialist

Western Washington University

Sept. 2020 – Present

Bellingham, WA

- Designed, built, and deployed a custom MS Access database that is more flexible, maintainable, cost effective, and user friendly compared to existing legacy software it replaced.
- Identified outdated and inefficient procedures and implemented solutions, resulting in modernized daily workflows, better documentation, and increased efficiency.
- Led a 10-person team in daily operations.

Project Co-Director

University of Wisconsin - Madison

Sept. 2014 – July 2018

Madison, WI & Remote

- Developed and carried out long-term, scientific research project using quantitative and qualitative data.
- Communicated technical knowledge in official reports, professional presentations, and to non-technical audiences.
- Oversaw a 15-person team in daily operations and managed logistics.
- Built website for public education (<https://schroeder.labs.wisc.edu>) (modified HTML theme, CSS, Bootstrap).

PROJECTS

Photo Sharing Platform

Live: carousel.jakepfaf.dev | Github: [short.jakepfaf.dev/68e3](https://github.com/jakepfaffenroth/short.jakepfaf.dev/68e3)

Vue, Tailwind, Node.js, Express, PostgreSQL, Redis, Backblaze B2, AWS SES/SNS, Jest

- Created full stack app where users create private photo galleries that can be easily shared via unique link. Invited 'guests' can view shared galleries and receive email/browser notifications without creating their own accounts.
- Developed image processing pipeline that creates optimized full- and thumbnail-resolution versions of original file and saves to Backblaze B2 cloud storage, resulting in reduced storage costs and bandwidth needs.
- Solved inefficient image processing pipeline by utilizing data streams and offloading tasks to a Redis queue system. This increased speed, reduced memory load, and eliminated temporary disk storage of uploads.

CSV Data Reformatter

Github: [short.jakepfaf.dev/e7f9](https://github.com/jakepfaffenroth/short.jakepfaf.dev/e7f9)

Javascript, HTML5, CSS3, Jest

- Developed a web app using javascript, HTML5, and CSS3 that automates complicated and tedious data restructuring of client-uploaded .csv files containing experiment results.
- Wrote unit tests in Jest and Chai to ensure accurate output.
- Handled inconsistent input data provided by client by sanitizing input and allowing output field renaming.

Weather Web App

Live: weather.jakepfaf.dev | Github: [short.jakepfaf.dev/68a6](https://github.com/jakepfaffenroth/short.jakepfaf.dev/68a6)

Vue, Node.js, Express, Tailwind,

- Designed and developed responsive web app using Vue 2 and Node.js/Express that fetches ClimaCell API weather forecasts for user location using Geolocation API, or for search locations using HERE geocode API.
- Mitigated rate-limited weather API by implementing a 'demo' mode with static data that automatically turns on when the hourly/daily request quota is reached, allowing the app to continue to function for demo purposes.