Title: Rethinking Visualization: From Principles to Storytelling

Instructor: Marvin Schmitt

Abstract:

This workshop goes beyond the raw coding aspects of visualization. We'll approach scientific visualization from a conceptual perspective, helping you design clear and accessible figures, optimize your visualization workflows, and use modern tools to effectively communicate your message.

Key topics include:

- Conceptualization: Plan tailored visualizations (e.g., overview figures, complex experimental designs, interactive plot, communicating uncertainty).

- Design: Color palettes, consistency, and accessibility to create visually appealing and inclusive plots.

- Workflow: Automate routine tasks like saving figures and managing consistent layouts.

- Tooling: Use Quarto for continuously updated reporting and web-hosted content with interactive elements.

Prerequisites:

Proficiency in basic visualization coding (e.g., R with ggplot2, Python with matplotlib).

Assignment:

Bring your own laptop with:

- R and the package ggplot2, or Python and the package matplotlib installed.

- Quarto installed: https://quarto.org/

- Free GitHub account: https://github.com/

Credit: 2 workshop days