

Curious about Coding, Neuroscience & Data Visualization?



Contact: jtroidl@g.harvard.edu & jbeyer@g.harvard.edu

Neuroscientists hypothesize that **connectivity motifs** of neurons are building blocks for information processing in the brain. This project aims to develop a visualization tool to interactively query and visually analyze connectivity motifs in vast nanoscale brain networks. **We are looking for a motivated research intern (undergrad/grad) interested in helping design & code new visualization methods in a collaborative environment.** Please contact Jakob Troidl and Johanna Beyer to get more details if you are interested.

Requirements:

- Interest in visualization and neuroscience research, esp. Connectomics
- Solid programming experience (Python, Javascript)

Beneficial (but not required):

- Knowledge of 3D graphics (e.g., using Three.js)
- Knowledge of frontend programming using React

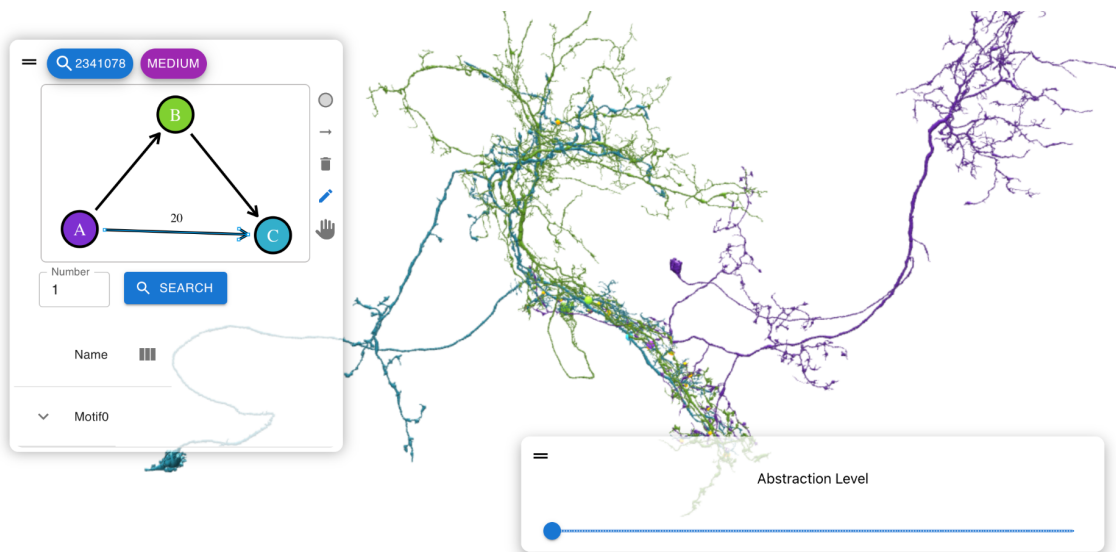


Figure 1. Prototype of our visual motif analysis tool. Users can sketch motifs by drawing a small graph as a node-link diagram. Motif instances are then visualized as interactive 3D renderings.