Resources

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1 GitHub repositories

- G3 freely-walking experiments
- G4 electrophysiology direction selectivity protocol
- G4 electrophysiology nested receptive field protocol
- G4 tethered flight 2-alternative forced choice experiments
- **Janelia SciComp** G4_Display_Tools repository for the G4 software GUIs

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2 G4 software and GUIs

The G4 GUIs are designed to be user-friendly and allow for the generation of patterns, position functions, and experiment designs without needing to write code.

- `G4_pattern_generator_gui` — Generate patterns. See the tutorial.

- `G4_function_generator_gui` — Generate position functions. See the tutorial.

- `G4_experiment_designer` — Design experiments. Learn more.

- `G4_experiment_conductor` — Run experiments. See the getting started guide.

> ℹ **Where are the GUIs used?**
>
> - For running Protocol 1 of the Nested RF Protocol and designing bar stimuli used in the electrophysiology experiments.
> - For running the TAFC bar fixation task on the tethered flight setup.

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3 LED Display documentation

The **LED Display Tools** documentation contains detailed information on the different versions of the LED arenas, the GUIs for generating patterns and running protocols, and the MATLAB functions for interacting with the LED arenas.

- G3 user guide — historical information about running experiments on the G3 and G4 arenas, especially tethered flight experiments. Explains the `panel_com` class of functions.

- G4 documentation — detailed information on the G4 setups and the GUIs for generating patterns and running protocols.

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4 How to…

- Make the Google Form logging system