

Initial project goals

- *Goal*: Reproduce some of the results of Cueva and Wei, 2018
- Roadmap: 1. Write code for simulating animal motion 2. Train RNN on simulated trajectories 3. Examine RNN units to see if any have grid, place, or border cell properties
- Motion simulation
 - Current status: direction is sampled from Brownian motion process, and speed is sampled from categorical distribution
 - Need to try other approaches once network is training successfully
- Network training
 - Going to start with simple Elman RNN trained with Adam
 - Might need to try Hessian-free optimization algorithm