1. Key concepts
   1. Gaze cueing
      1. Robust effect tested across a range of contexts
      2. Less understanding of the cognitive mechanisms underlying gaze cueing.
   2. Drift diffusion model
      1. Offers insight into how people make simple, two-choice decisions
      2. Can allow us to theorize how gaze cueing effects specific cognitive mechanisms.
2. Gaze Cueing literature review
   1. justify the lack of understanding.
3. Why a Computational Modelling Approach?
   1. Strength of understanding cognitive mechanisms.
   2. Evidence accumulation models
4. Drift diffusion-Model
   1. General
   2. Starting point
   3. Drift rate

Bias or Facilitation? A Computational Approach to Understanding the Gaze Cueing Effect

The “gaze cuing” effect refers to the tendency for humans to respond faster to targets that appear in the same direction that another person is looking (congruent cues) compared to targets that appear in the opposite direction (incongruent cues). This effect has been comprehensively studied using a range of paradigms (e.g. detection, location... paradigms) and a variety of face types (e.g. real human faces, cartoon faces, robot faces). However, the majority of this literature is effect driven— that is, it has been primarily focused on testing the robustness of the gaze cueing effect across contexts. Although this has been useful to determine the effect’s reliability, there is little research aimed at developing a theory for the cognitive underpinnings of gaze cueing. For this, a computational modelling approach could be useful.

There has been a substantial body of work dedicated to developing computational models of rapid, two-choice decision-making. Among the models which have been the most successful at predicting and explaining these types of decisions are evidence accumulation models.

cross a range of paradigms, using a variety of stimuli such as photos of real human faces (), cartoon human faces (), and robot faces (McKay et al., 2021). Gaze cueing is typically assessed using a “gaze cueing paradigm” whereby the participant is..