

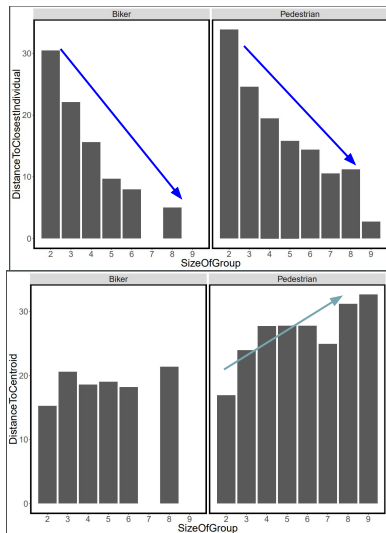
Proxemic Reasoning For Group Approach

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Dataset

We used the Stanford Drone Dataset (SDD). The SDD consists of an overhead view of eight different locations around Stanford University, each with video and annotations. The annotations contained pedestrians, bikes, golf carts, skateboarders, and buses. The dataset itself contains over 19K targets (primarily pedestrians) and consists of many different types of interactions, groups, and target motion.

When *approaching a stationary group of people*, the strategy that matched human behavior closest was to *pick the closest person and move to a random location next to them*.



Strategies Tested

- Random Person/ Square (RP/RS)
- Closest Person/ Square (CP/CS)
- CP-RS
- RP-CS
- Center of Group
- Centroid Distance (same distance to center as all members)
- Proxemic Distance (same distance from all group members as average distance)

