

SWARM Direction Voting

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- **Problem Statement**
- **Proposed Solution**
- Implementation Details
- Results
- Questions

- In SWARMs there is a problem of finding a direction in a way that the SWARM should be kept connected (like a single component graph)
- Based on
 - Alternative Voting Systems
 - ✓ Steven J. Brams
 - ✓ Peter C. Fishburn

Political Parties and Elections in the United States: An Encyclopedia

1991

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Proposed Solution

- **Alternative Voting Systems**
 - Approval Voting
 - A variant of Approval Voting
 - One agent can only vote for 1 preference
 - The option that gets the maximum votes is selected
 - In the current scenario the chosen direction is the one selected by the maximum number of agents.

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Implementation Details

Framework: JADE

One of the most significant frameworks for Agent Based Software Development.

A simple project to implement the Agent Communication Architecture for conducting the voting among the agents.

Based on two kinds of messages

PROPOSE

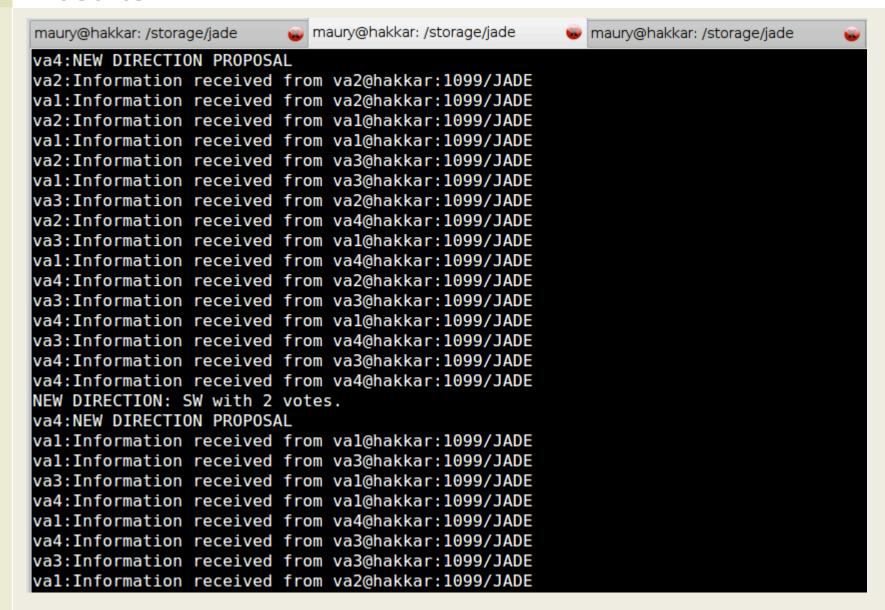
- used when a single agent wants a poll for new direction

INFORM

- used for casting the vote

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Results



Thank you!!!

Questions???