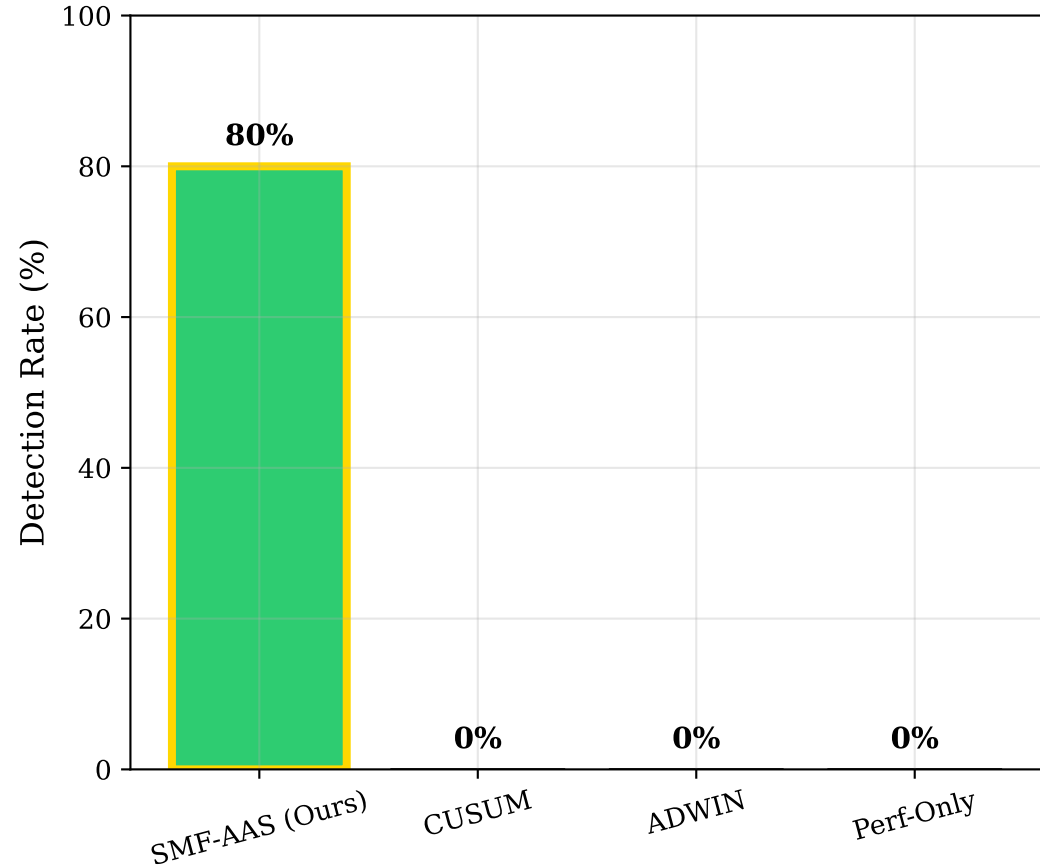


# Maze Environment: Detection Rate



# Analysis: Why Multi-Component Detection Matters

Why SMF-AAS succeeds on Maze:

- Maze is a single-player navigation task
- Strategy change = goal position moved
- No performance change (agent still fails initially)

Baseline methods fail because:

- CUSUM/ADWIN: Monitor scalar performance only
- Performance-Only: No reward change detected

SMF-AAS succeeds because:

- S component: Detects changed state visitation
- B component: Detects changed movement patterns
- Multi-component approach captures behavioral shift even without performance change

This demonstrates SMF-AAS's advantage for detecting strategy changes that don't immediately affect observable performance metrics.