## Learning Search Guidance from Failures

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### Problem Setting
- Finite state, action spaces
- Deterministic transition function
- Multiple problems with (init state, goal)
- Satisficing, not optimal planning
- Failed search attempts in training

### Dead-Ends
- A state with no successors is a dead-end.
- A state whose descendents are dead-ends is a dead-end.
  ➤ Many domains do not have dead-ends!

### Eliminable Edge Sets
- An edge set that can be removed while keeping a path from initial state to goal.

### Practical Example

#### Tasks
- RedWhiteGrid
- TMaze
- WallRoom
- FourRooms

#### Approach

### Train Expansion Comparisons

### Model Comparisons