

Applications of Stacks and Queues for Constraint Satisfaction Problems

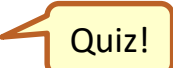
Jyh-Shing Roger Jang (張智星)

CSIE Dept, National Taiwan University

Constraint Satisfactory Problems

- Example: Search a feasible configuration in a game
 - Nonograms
 - 2048
 - 8-queen problem
 - Sudoku (數獨遊戲)

Graph Traversal

- Tree traversal
 - Use a **stack** for DFS (**depth**-first search)
 - Use a **queue** for BFS (**breadth**-first search)
- Why DFS is preferred? 

占用小記憶體
feasible configuration

A Walk-through Example of Search in Games

- 4-queen problem
 - Use a stack for DFS
 - Use a queue for BFS

