

Shared Memory Parallel BFS

Introduction

BFS 101

BFS Example

Is BFS Inherently Sequential?

Intuition - Why We Might Do Better

BFS Example 2

High Level Approach to Parallel BFS

Bags: Key Properties

Pennants - Building Blocks for Bags

Pennants

Combining Pennants Into Bags

What is the Cost of Insertion?

Combining Two Bags

Cost of Other Operations

Bag Splitting

Finishing the Parallel BFS with Bags

Conclusion