Lectures


**Geometric algorithms.** Intersection of segments. Convex hull: Graham’s scan, Jarvis’s march.
Dijkstra + proof

Φ method + definitions

MaxFlow + proof

memorize

BFS

DFS

“breakpoint” proofs

Prim

Kruskal

Bellman-Ford

Johnson

“helper” problems

dynamic programming

∀/∃ thinking: dodgy proofs

O/Ω thinking: tight bounds

[Ex sheet 4 q 10, Ex sheet 6 q 7]

appreciate

topo sort

matching

“translation” proofs

Disj. sets

Fib. heap

amortization strategies

∀/∃ thinking: dodgy proofs

O/Ω thinking: tight bounds

[Ex sheet 4 q 10, Ex sheet 6 q 7]

dynamic programming

∀/∃ thinking: dodgy proofs

O/Ω thinking: tight bounds

[Ex sheet 4 q 10, Ex sheet 6 q 7]