

Parallel 3D Collision Checking

(Written in Rust)

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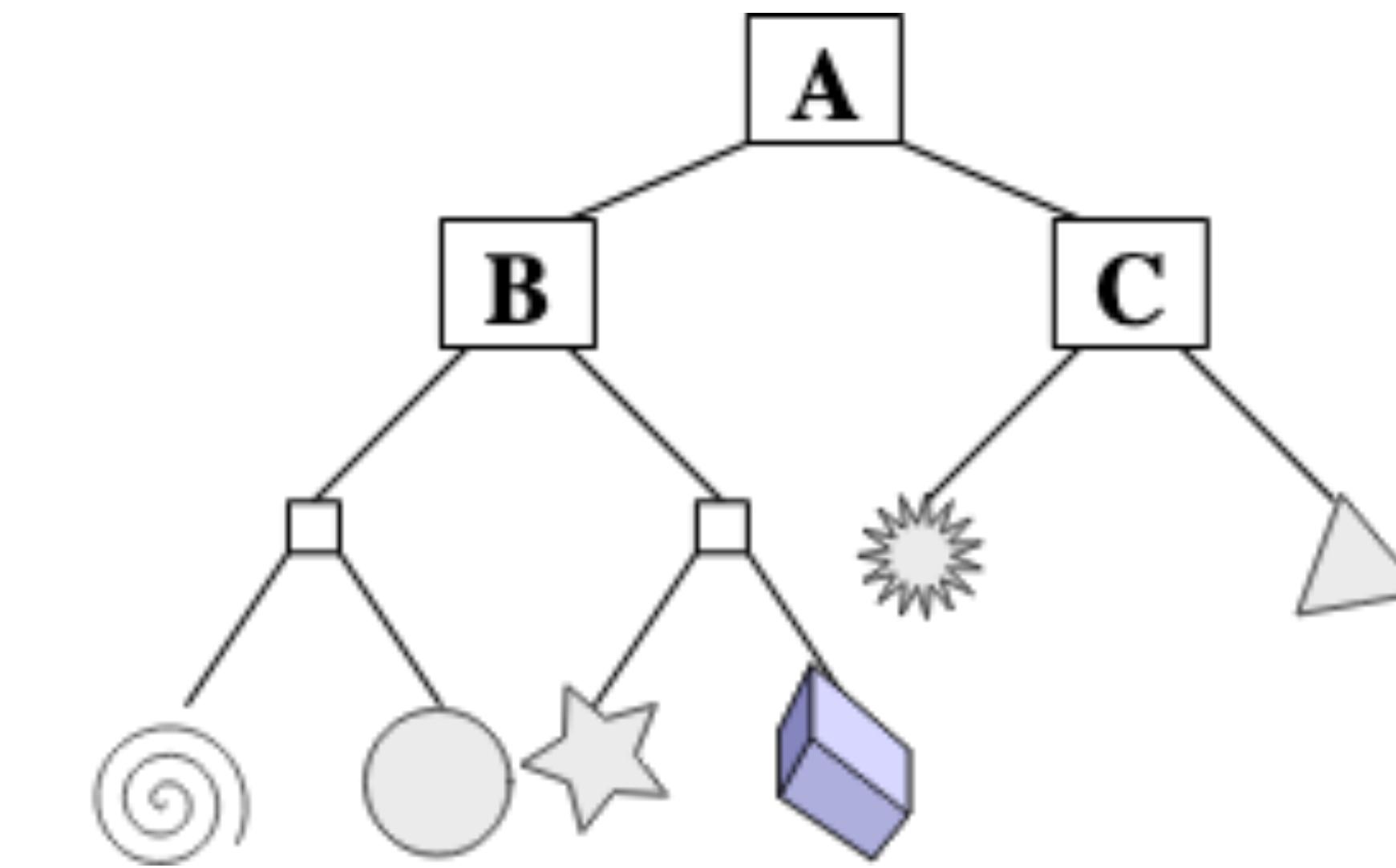
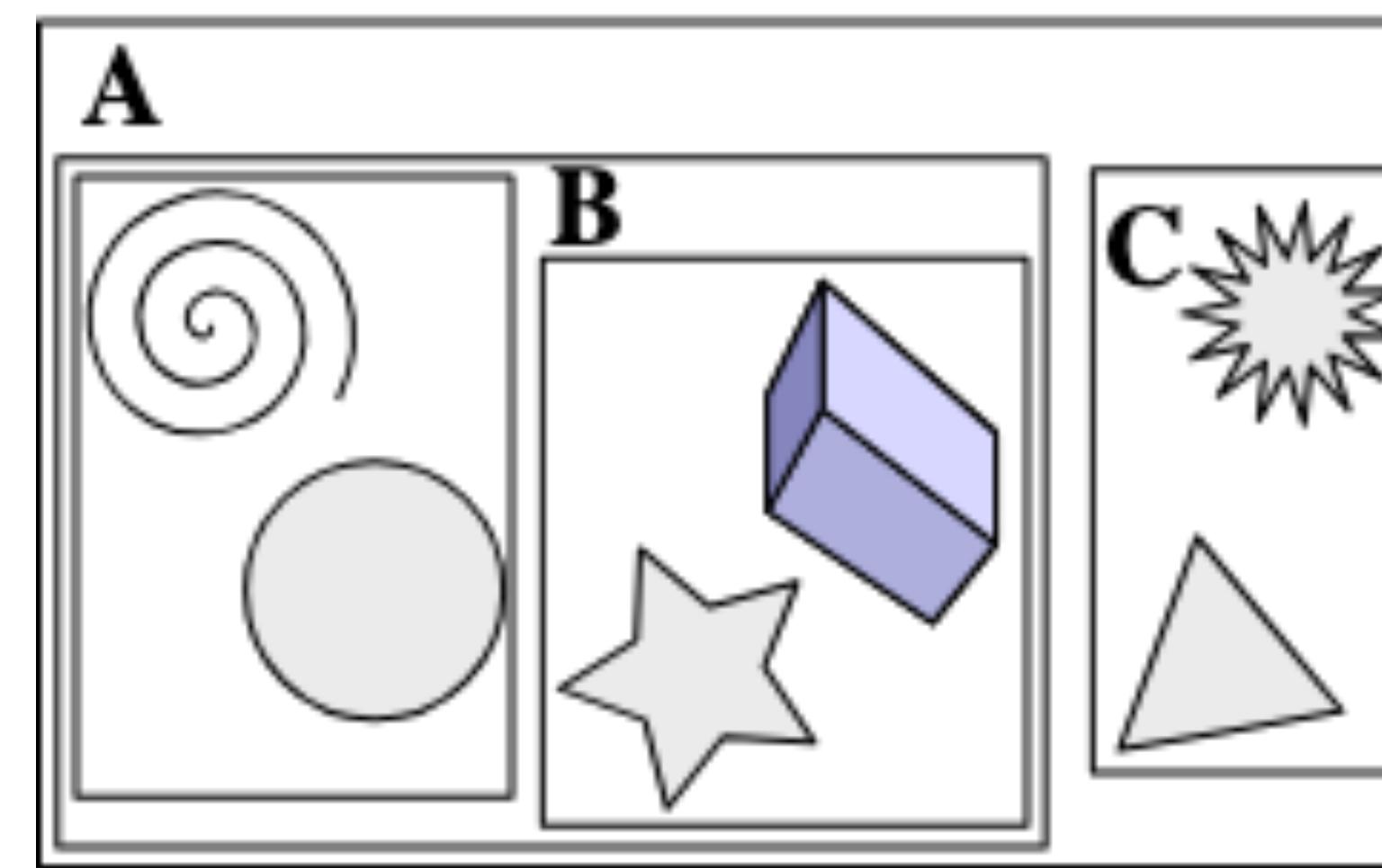
Research Significance

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Collision Checking Algorithm

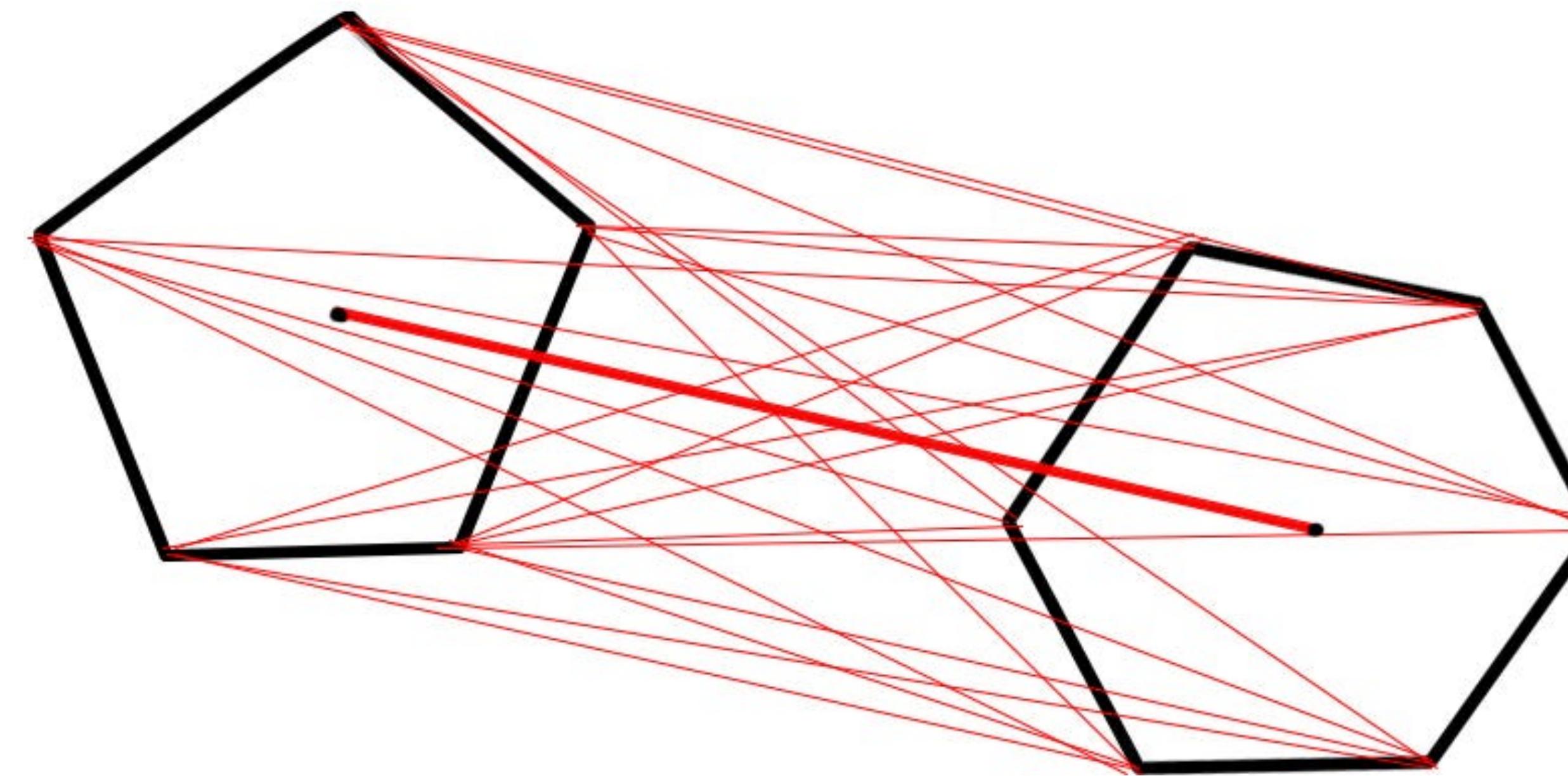
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Broad Phase: Using Bounding Volume Hierarchy (BVH)

Collision Checking Algorithm Cont.

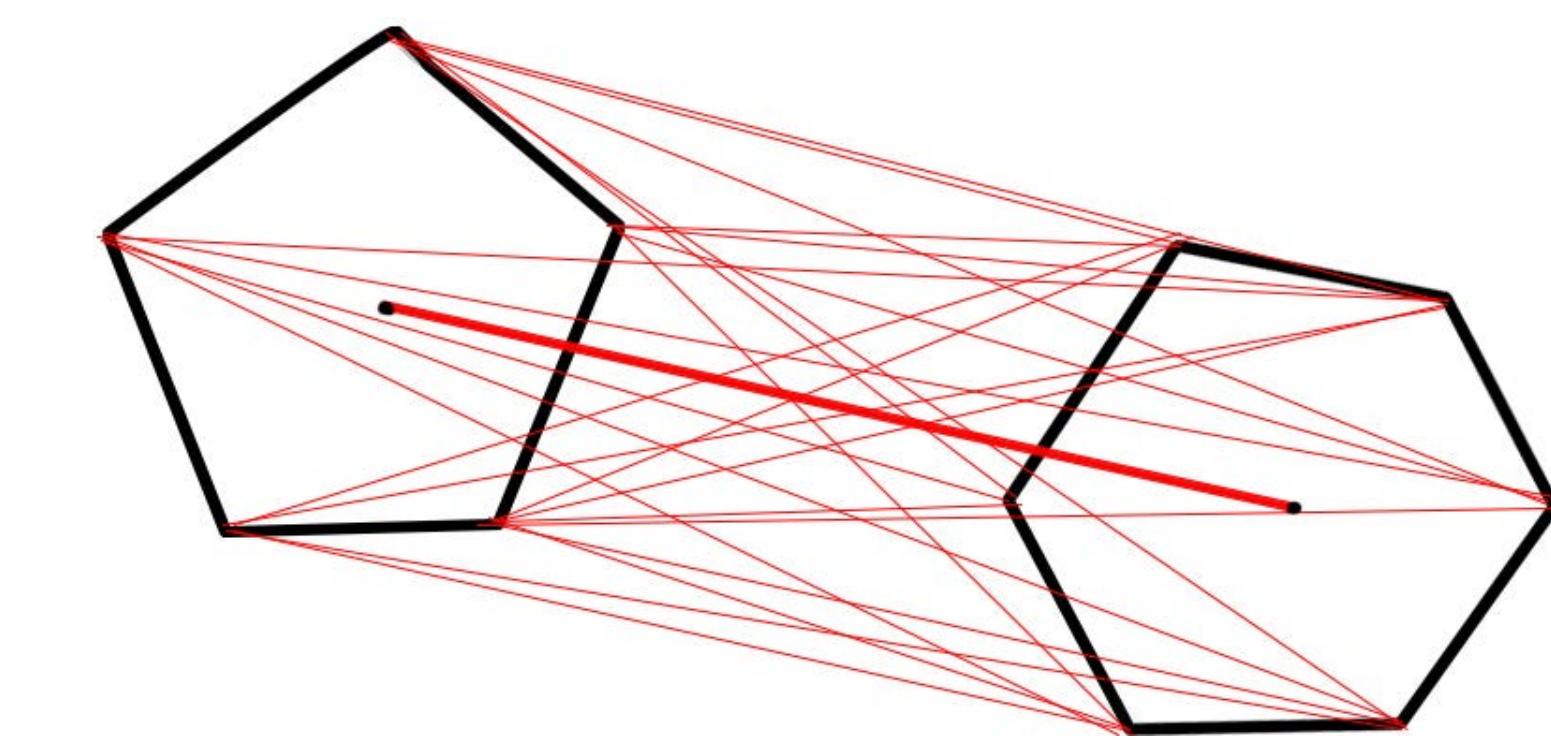
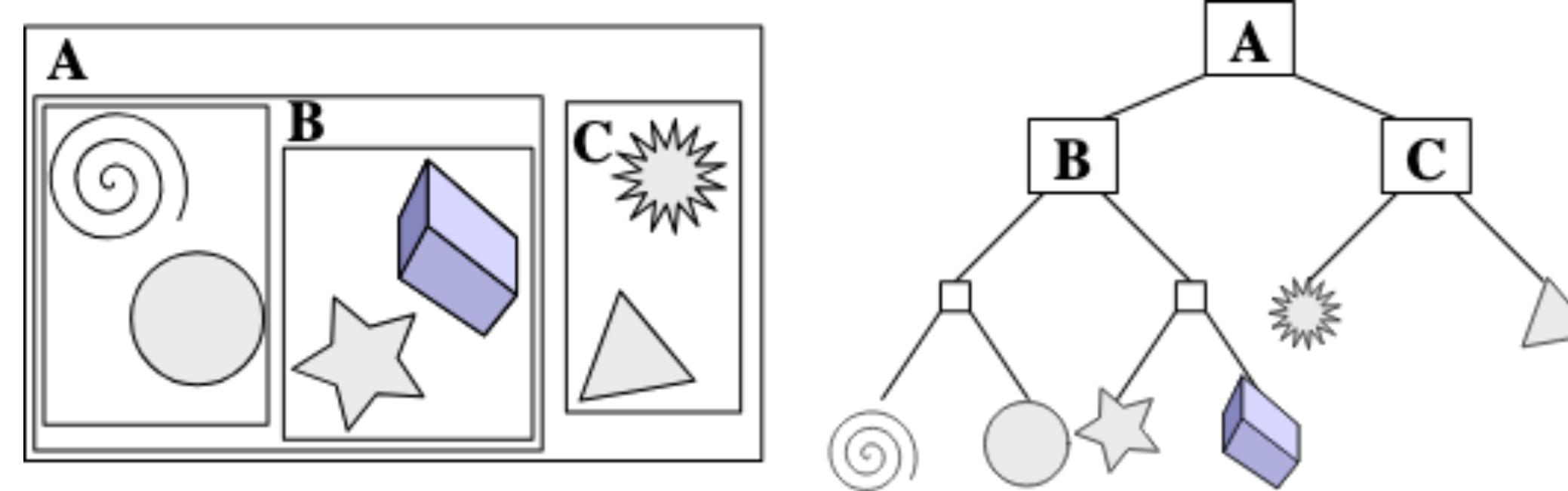
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Narrow Phase: Gilbert–Johnson–Keerthi (GJK) Distance Algorithm

Parallel Version

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**Non-Trivially Parallelized Broad Phase + Trivially Parallelized Narrow Phase
(Very Similar to HW5 in General)**

Why Rust?

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Fast + Ergonomic