

A Scalable DCEL implementation

Andres Calderon

University of California, Riverside

May 14, 2021

Evaluation Plan...

Performance by workload at partition level			
Parameters	Alternatives		Performance Measure
	Single SDCEL construction	Merged SDCEL construction	
Number of edges per partition range: 4K, 8K, 12K, 16K, 20K, 24K			Runtime
Performance by workload at general level			
Parameters	Alternatives		Performance Measure
	Single SDCEL construction	Merged SDCEL construction	
Data sample (number of edges) range: 4M, 8M, 12M, 16M, 20M, 24M			Runtime
Performance by local partitioning variant			
Parameters	Alternatives		Performance Measure
	Single SDCEL construction	Merged SDCEL construction	
Partitioning variant: values: None, Quadtree, RTree			Runtime

Other papers...

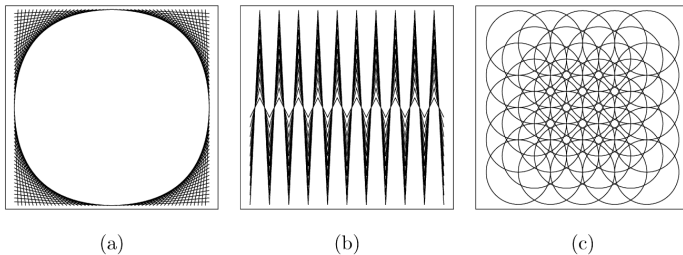
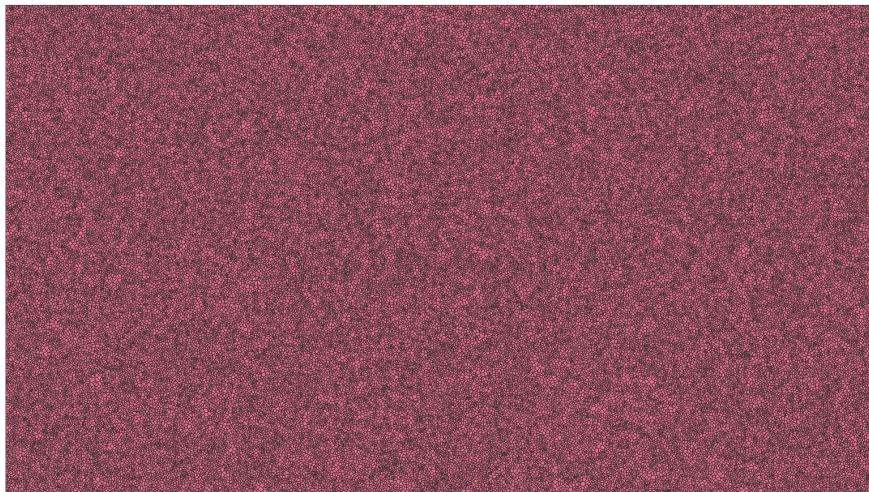


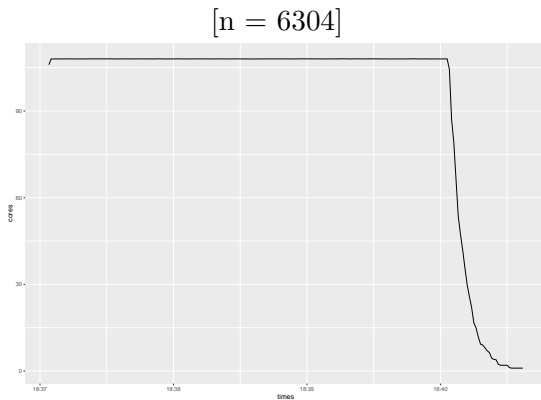
Fig. 7. Structured inputs used in the benchmarks: (a) the `onebig_100` segment input, (b) the `sines_10` polyline input, (c) the `packed_41` circle input.

Generator...



Balance issues...

Running few partitions



Balance issues...

Running many partitions

