Athul Shibu Kurian
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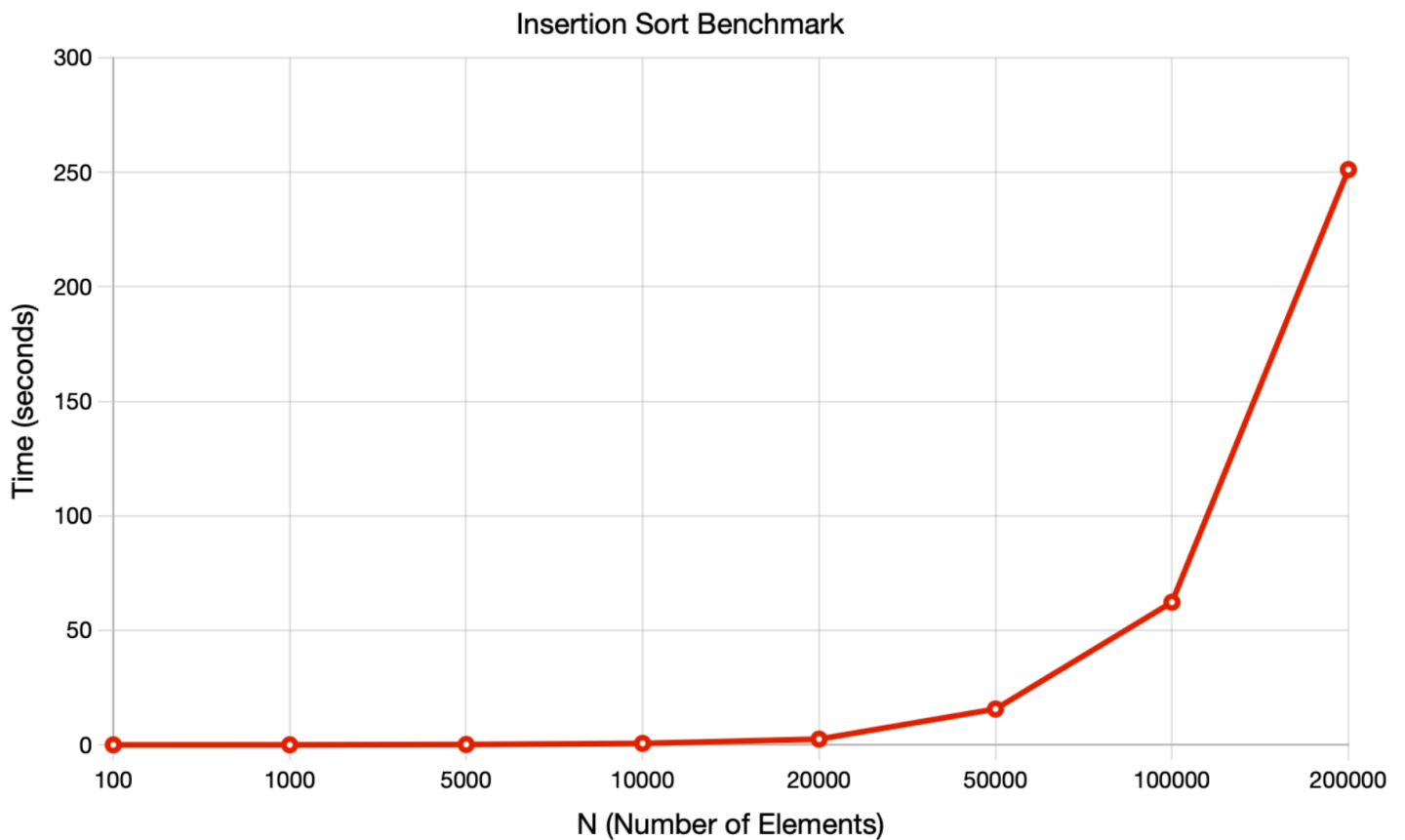# Benchmarks

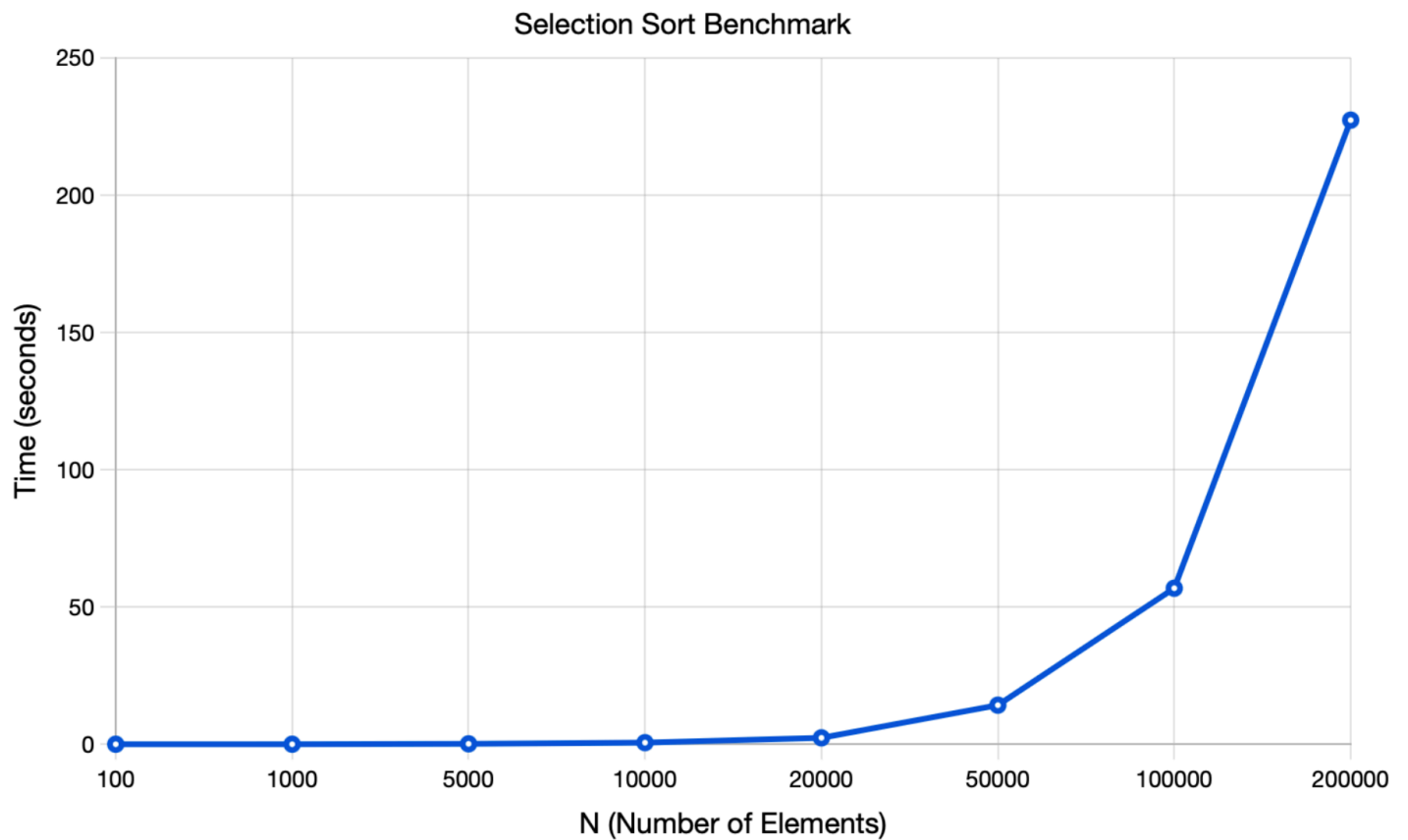## 1. Insertion Sort

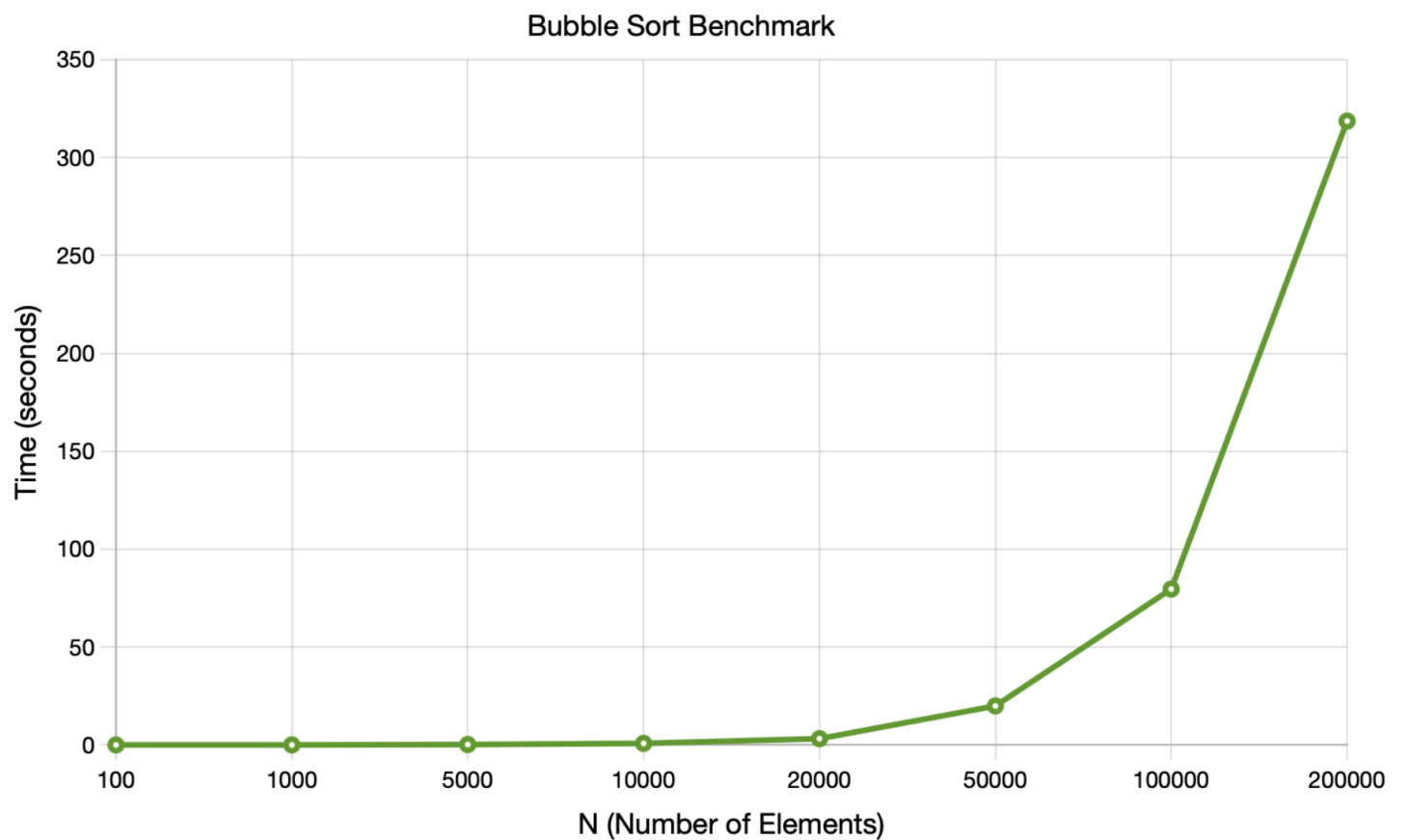| N (Number of Elements)	Time (seconds)
100	0.0005
1,000	0.0067
5,000	0.1573
10,000	0.6274
20,000	2.5052
50,000	15.6438
100,000	62.2759
200,000	251.1875

2. <u>Selection Sort</u>

N (Number of Elements)	Time (seconds)
100	0.0004
1,000	0.0058
5,000	0.1459
10,000	0.5793
20,000	2.3246
50,000	14.2304
100,000	56.8417
200,000	227.3659

3. Bubble Sort

N (Number of Elements)	Time (seconds)
100	0.0006
1,000	0.0079
5,000	0.1984
10,000	0.7945
20,000	3.1876
50,000	19.9084
100,000	79.6352
200,000	318.6543

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<u>System Specifications</u>

SOC: Apple M2 chip with 8-core CPU, 10-core GPU, 16-core Neural Engine
Memory: 16GB unified memory
Storage: 512GB SSD
Operating System: macOS Sonoma 14.4.1
Compiler: (clang++) Apple clang version 15.0.0 (clang-1500.3.9.4)