**Parallelization of a Ray Tracer**

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**Abstract**

# **Introduction and Background**

**The Ray Tracer algorithm** A ray tracer algorithm computes the “visibility between point”

# **Initial Analysis**

Initial analysis of the base-line performance of the application and likely places that can be parallelised.

# **Methodology**

Description and justification of the approach used and its overall suitability and rigour.

# **Results and Discussion**

Suitable performance analysis and testing documentation for the problem, including quality of presentation of the results.

Increasing the number of spheres has a more noticeable effect on the sequential code than both threads and parallel for, which both handle it well.

In all 3 cases, going from 9 spheres to 12 actually speeds up the process, however the jump to 15 pushes the times higher than where they started with 9 spheres.

# **Conclusion**

Level of discussion and appropriateness of the conclusions drawn based on the results gathered.

**References**

1. *An Overview of the Ray-Tracing Rendering Technique* from <https://www.scratchapixel.com/lessons/3d-basic-rendering/ray-tracing-overview>