

15-400 Milestone 3
Max Slater
<https://thenumbat.github.io/15400-s21/>

Changes

No major changes.

Accomplished

1. Added infrastructure for varying and benchmarking different bounding volumes.
2. Implemented bounding spheres and oriented bounding boxes in addition to the default AABBs.

Milestone

My scheduled milestone for this week was “begin work on GPU implementation” and “explore hardware RT.”

I’m a bit behind on this, as I’ve only now finished the CPU-side investigation of performance bottlenecks and our idea to test new bounding volumes. I will start working on a GPU implementation for the next milestone.

Surprises

N/A

Looking Ahead

I’ll be discussing how we want to approach making a GPU-efficient version of our library with my collaborators this week.

Revisions

Since progress has been slow, I doubt I will end up making the proposed 125% goals. I am still on track for the 100% goals, though. Also, it’s not essential to complete the polishing a production-ready library this semester, since the real research work comes before that.

Resources

We're finally nearly ready to put together a new lab machine with hardware RT.