

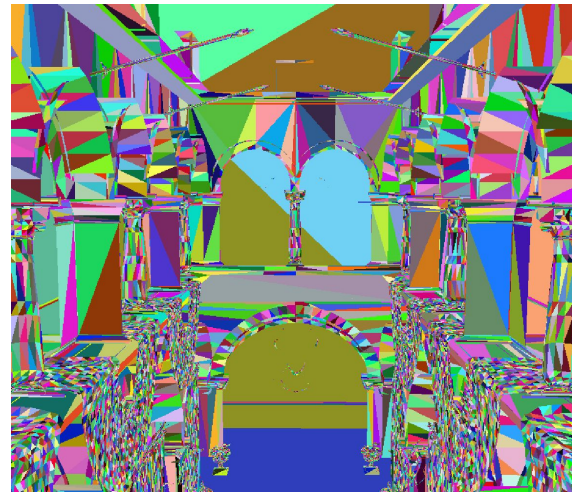
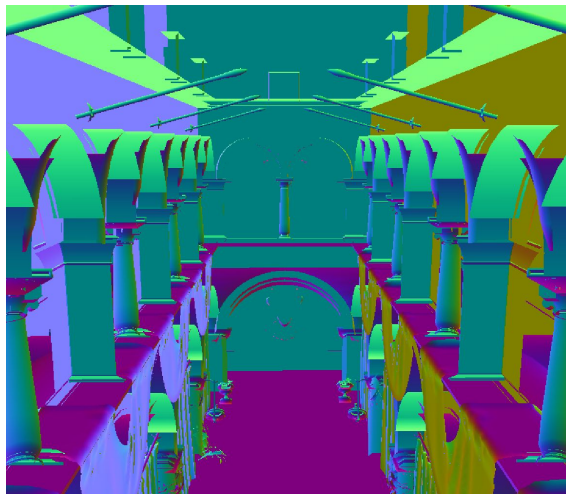
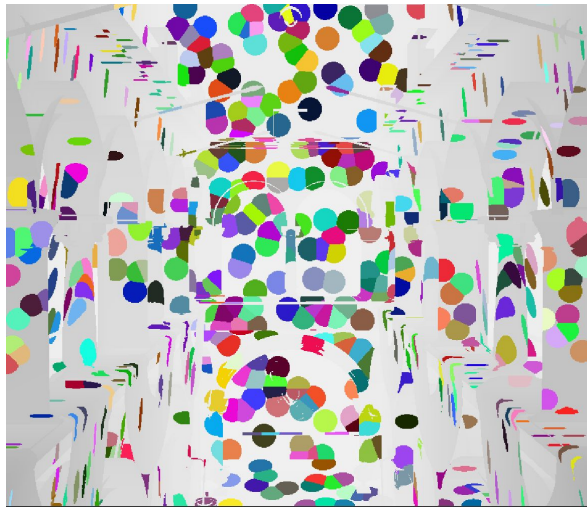


# SurfelPlus Milestone 2

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Zhen Ren, Ruipeng Wang and Andy Wang  
CIS 5650 – Final Project

# Milestone I Recap



- Slowed generation for better visualization
- Visibility & Normal buffer

# Goals

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- Milestone 2:
  - Better surfelization (done)
  - Surfel recycle (done)
  - Surfel acceleration structure (done)
  - Surfel raygen & ray trace (partially done)

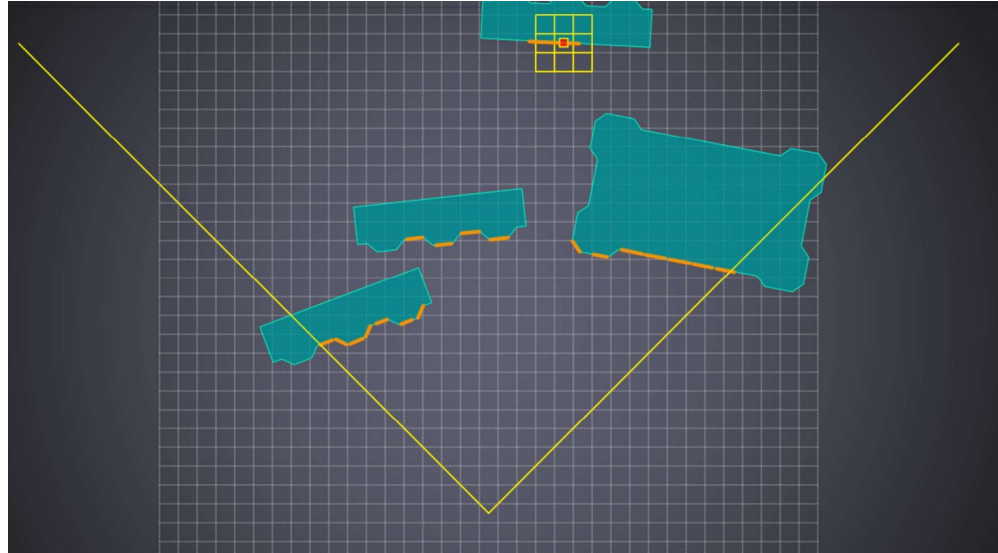
# What we have done so far

- Better Surfelization/ Surfel Recycle

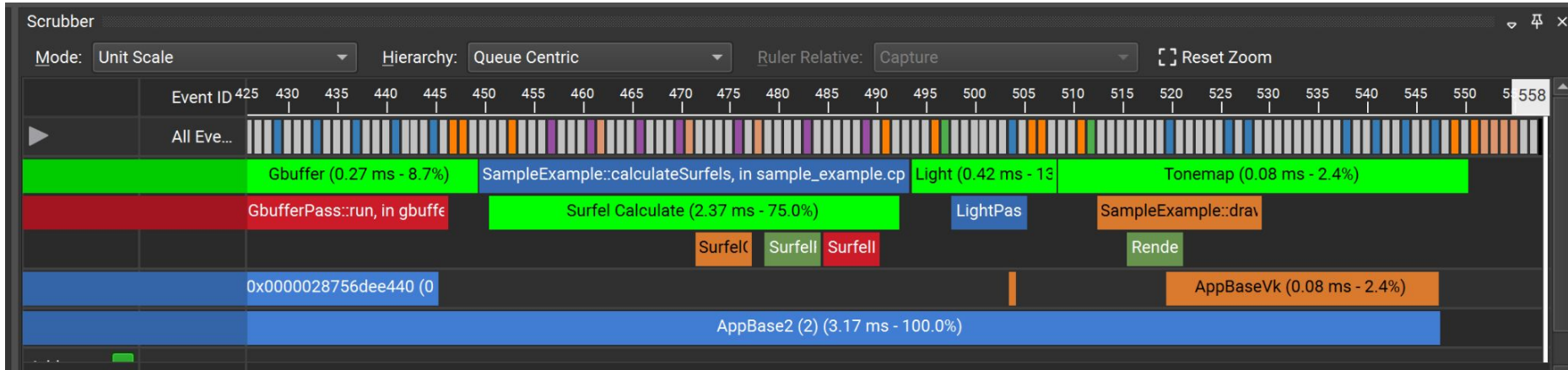


# What we have done so far

- Naive Surfel Acceleration Structure
  - Uniform grid



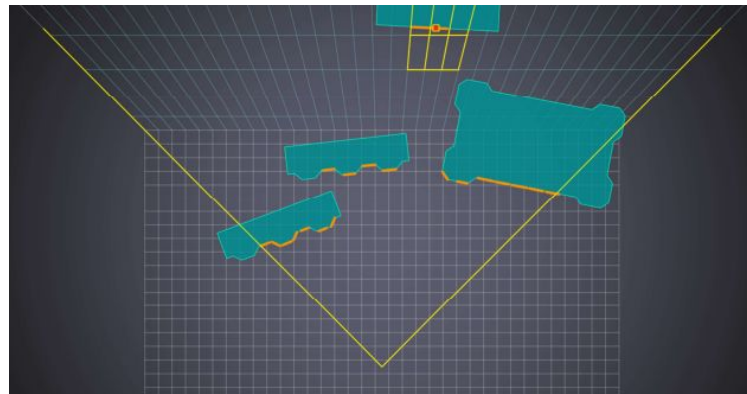
# Current Progress



- Surfel Compute Passes
  - Surfel Generation
  - Surfel Trace
  - Surfel Update/Recycle
- Collect all integrate pass

# Goals

- Milestone 3 & Final:
  - Glossy Indirect
  - Spatial Temporal Filtering
  - Better Surfelization & Tracing
  - Non-uniform Acceleration Structure
  - Find Demo Scenes



# Live Demo!

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