

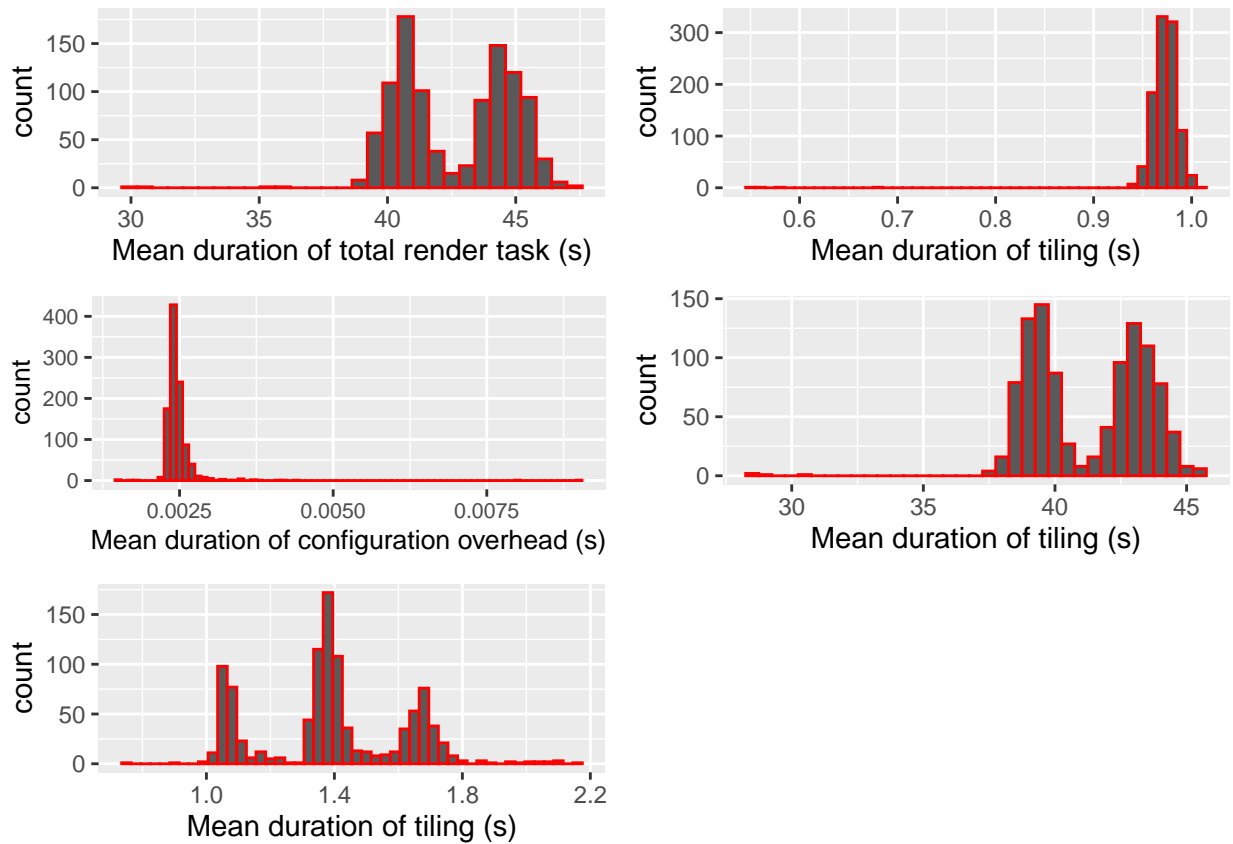
CSC8634 Cloud Computing Report

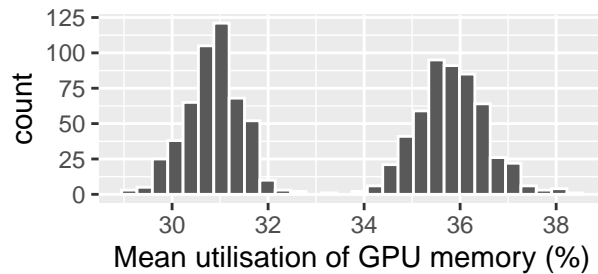
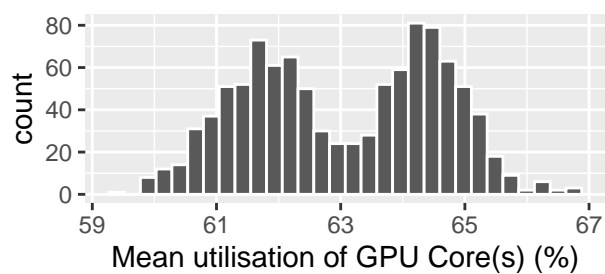
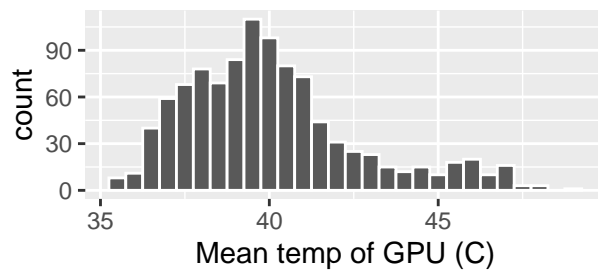
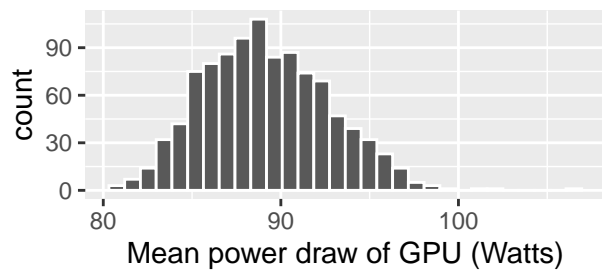
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Business Understanding

This report documents an exploratory data analysis of application checkpoint and system metric output data collected during the rendering of a 3d terapixel image of the city of Newcastle, UK. A terapixel is defined as 10^{12} pixels (1,000,000 megapixels), and so are extremely large images and therefore very computationally costly to produce. A path tracing renderer coupled with a scalable public cloud supercomputing architecture was successfully used to render the terapixel image in under a day using public cloud laaS nodes. The completed terapixel image is accessible for users to explore the city in 3D with zoomable scales ranging from a complete overview to minute detail.





References

<http://www.gigamacro.com/worlds-first-terapixel-macro-image/>