3D Modeling of Indoor Scenes

- A 180-degree view of an indoor scene was captured and combined using the Iterative Closest Point algorithm to produce a combined point-cloud.

- The combined point-cloud was sampled with 30,000 points and reconstituted using screened Poisson surface reconstruction to create a 3D model.

Social Impact

- This technology has many possible applications such as cartography, law enforcement, Augmented Reality, and video game design. It has the possibility of creating a space for simulating realistic indoor conditions for educational/research purposes.

Glossary

Point-cloud - A set of points in 3D space
RGB-D - Red, Green, Blue, Depth data

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