Paper presentation : UltraStereo: Efficient Learning-based Matching for Active Stereo Systems

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Examples

Bla bla bla

- Bo
- Bi
- La Bo

Examples

Figure: Examples

Examples

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Examples

Figure: Examples

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Examples

Figure: Examples

Invalidation

Issues which the pixels from the final depth image won't contain any estimations :

- Oculusions
- Saturation of infrared sensors
- low signal noise ratio

How limits this errors ?

- an algorithms does an invalidation pass durint the post-processing step

Invalidation

Figure: Quantitative results on syntatic data

Example of depth-map produced with UltraStereo

Look at the thin structures like plants

Figure: Qualitative Evaluation

Edge fattening

Other issiue is the edge fattening. To measure it they :

- used a hand to test their algorithms
- put a hand at 1 m from the sensors
- defined key hand pose for each frame

Edge fattening

Figure: Quantitative results on syntatic data

Edge fattening

Figure: ???

Binary representation

Figure: Quantitative results on syntatic data

Interferenc and Generalization

Figure: Quantitative results on syntatic data

Conclusion

Best algorithms ever made !

Questions

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Thank you for your attention !