ETH zürich

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

Jasmin Fischli, Philipp Göldlin, Julie Veya, Jonathan Burkhard

Supervisor: Sattler Torsten

Table of contents

Slide Example

Evaluation
- ???
- Invalidation
- Binary representation
- Interferenc and Generalization

Conclusion

Example

Figure: Example

???

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 enrrors ?

- 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

Figure: ???

Binary representation

Figure: Quantitative results on syntatic data

Interferenc and Generalization

Figure: Quantitative results on syntatic data

Conclusion

Best algorithms ever made !

Thank you for your attention !