Semi-automatic classification of power lines by using airborne LiDAR

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Presented at the FIG Working Week 2017, May 29 - June 2, 2017 in Helsinki, Finland
Introduction

- Mapping of power lines for cadastre use
- LiDAR data
- Fusion of different methods for data extraction
- Problems with methods
- Obtained valid and accurate data
Workflow

Input data

Automatic classification
Semi-automatic classification
2D and 3D vectorization
Longitudinal profiles and cadastre maps
Used data
Misclassified points

misclassified points of pole

points close to vegetation that belongs to pole
2D and 3D Vectorization of poles
3D Vectorization of poles and wires
Longitudinal profile and cadastre map
Conclusion

- Valid information for cadastre
- Precise and accurate data used in Electricity distribution infrastructure

Future work:
- Will be focused on finding the ideal solution for semi-automatic classification and vectorization.
- Solution should be basic automatic classification that would classify much more point classes that automatic classification could not classify.
Past                            Future is here