# Method Description for Vaihingen: 2D Labelling challenge

Guanzhou Chen, Xiaodong Zhang

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, Wuhan, China.

We trained our own end-to-end SDFCN V2 model on the ISPRS Vaihingen dataset.

Training details:

| | |
|---|---|
| Training dataset | 1, 3, 5, 7, 11, 13, 15, 17, 21, 23, 26, 28, 30 |
| Validation dataset | 32, 34, 37 |
| Batch size | 16 |
| Training epochs | 30 |
| Shuffle training data | yes |
| Optimizer | adadelta |
| Data used | Only IRRG, no DSM and nDSM |
| Data augmentation | rotate 90° random times<br>horizontally and vertically shift -5px~5px<br>zoom 1~1.2 times<br>horizontally and vertically flip randomly |
| CRF-based post processing | No |
| Merging policy | Mask Weighted Policy with rotation |

CVEO Team
Wuhan University
2018/4/21