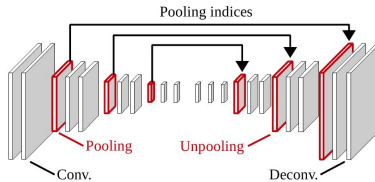


# High-Resolution Semantic Labeling with Convolutional Neural Networks

E. Maggiori, Y. Tarabalka, G. Charpiat and P. Alliez (ARXIV 2016)



- ▶ Dense semantic labeling, assigning a semantic label to every pixel, using CNN
- ▶ High spatial accuracy can not directly be achieved with categorization CNNs
- ▶ In-depth analysis of categorization networks for semantic labeling
- ▶ Establish desired properties of ideal semantic labeling CNN and asses how those methods stand to these properties
- ▶ Derivation of a CNN framework specifically adapted to semantic labeling problem
- ▶ Learning features at different resolutions and efficiently combine local and global information
- ▶ Evaluated on Vaihingen and Potsdam, provided by Commission III of the ISPRS