

Building Type Classification from Street-view Imagery using Convolutional Neural Networks

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The paper "[Building Type Classification from Street-view Imagery using Convolutional Neural Networks](#)," published today, presents how multiple convolutional neural networks (CNNs) are fine-tuned to classify buildings into different types (e.g., house, apartment, industrial) using their street-view images. The CNNs use the structure of the façade in the building's image for classification. Multiple state-of-the-art CNNs are fine-tuned to accomplish the classification task. The trained models provide a proof of concept and show that CNNs can be used to classify buildings using their street-view imagery. The training and validation performance of the trained CNNs are measured. Furthermore, the trained CNNs are evaluated on a separate test set of street-view imagery. This approach can be used to augment the information available on openly accessible databases, such as the Open Database of Buildings.

The paper "[Building Type Classification from Street-view Imagery using Convolutional Neural Networks](#)," part of the publication *Reports on Special Business Projects (18-001-X)*, is now available.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).

