

# Test Project Assignment

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November 2020

## Melown Technologies SE

Melown Technologies is a Prague-based company, part of Hexagon since 2019. We develop scalable photogrammetry technology for creating and visualizing 3D models of urban and natural landscapes, from street level detail to the planetary scale.

Our goal is to employ AI and computer vision to transform the real world into its photorealistic digital counterpart. We want to provide technology to extract useful information from this digital world and to enable its use in cloud based geospatial, AR, gaming and VR applications.

## Position: Machine Learning Developer

Behind pretty pictures there is a real world. 3D model is not only a mesh, there are buildings, trees, roads and many more. As a machine learning developer in our company your job will be to discover it. You will have to read journal papers, learn new things all the time and transform your knowledge into cool product.

## Assignment

In `dataset.zip`, you will find images and their pixel-wise labels along with `classes.json` containing a class description. Your task is to create and train semantic segmentation model with these images. Set up a private repository on GitHub and when you are ready, invite me, `MartinaBekrova`. Provide a code for training, trained model and also a simple script which takes path to an input image as a parameter and outputs prediction of the image.

We wish you good luck and we are looking forward to your results.