Intelligent selection tools turn 3D point clouds into a success factor!

POINTLY

POINT OUT WHAT MATTERS

What's the current situation for 3D point cloud tools?

Conventional point cloud tools are **limited**.

It takes a lot of patience to find the **right** views to apply the **right** selection and a lot of time to remove accidentally selected points.

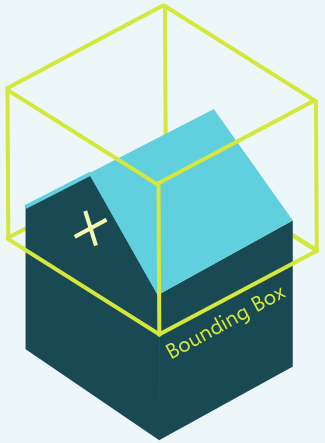
The autonomous driving sector is a notable exception. Teaching self-driving cars how to navigate the world safely requires the automatic detection of objects such as cars, pedestrians, street signs and other obstacles.

Standard classifiers are not fit to such complex tasks.

Advanced AI is required to extract this information from point clouds.

Training data for self-driving cars is usually generated in the form of bounding boxes. That might work for single-standing objects and is enough for many street scenes but let's assume you want to accurately detect parts of a building.

Think about trying to draw a bounding box around the complex shape of a roof without including walls and other objects that you would like to separately detect **it is impossible**.



What if you could not only detect any real-world object automatically in point clouds but also drill it down to its components?
And turn all that into better and more detailed 3D models as well as maps?

That is the untapped potential of point clouds and the promise of 3D AI.

POINTLY

Work efficiently with Pointly's intelligent selection tools

To train classifiers in order to detect custom objects from point clouds we need

training data

to teach the AI by example.
The only limit here is the **quality** and the **amount** of training data one can generate.

Pointly's segment selector allows you to select coherent segments with **only one click**.

No need to
- zoom around,
- change views and
- draw a perfect border.

Complex objects with difficult outlines can be quickly selected and assigned with an object class.

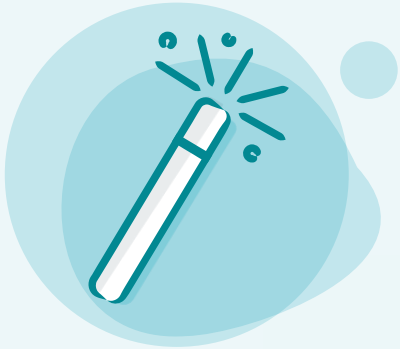
A polygon lasso tool provides an alternative wherever you would wish to adapt the segments manually. But the accuracy of Pointly's segment finder already satisfies most of all objects and does the heavy lifting for you. Our labeling service provider said to that:

"This would have taken one of my guys a day, now you can do it with one click."

Another useful feature is the 3D Bounding Box. With this versatile tool you can control the selection depth. Thus, you'll be able to classify objects which are really close to other objects or which need to be separated in space. **Quick tip:** Finish your selection by clicking on the right mouse button.

What's next?

The segment tool is only the beginning of many more intelligent selection tools that will speed up working with point clouds: Next in the pipeline is a dynamic Magic Wand selector as well as a tool for selecting similar objects to already selected ones.



POINTLY