



# TrimBot2020



The TrimBot2020 project researches the robotics and vision technologies to prototype the first outdoor garden trimming robot. The robot will navigate over varying terrain, approach rose bushes, hedges and boxwood topiary, to trim them to an ideal shape. The robot will be based on a modified Bosch Indego robot lawnmower, which will navigate using a user-defined garden map and 3D scene analysis, and then visually servo a novel electric plant cutter.



**BOSCH**

**ETH** Zürich



university of  
groningen



The technical work of the team at the University of Groningen concerns methods for intensity image analysis and algorithmic speed-up.

The main contributions are in scene understanding, with algorithms for scene recognition and rose stem segmentation based on trainable filters, and in navigation with alternative methods for camera localization based on the use of artificial landmarks.

The University of Groningen is responsible for the coordination of dissemination activities.



European Commission

[www.trimbot2020.org](http://www.trimbot2020.org)

