

Stage weken voor de opleiding Master Informatica

Titel: Computer Vision: Sensor Fusion

Gegevens bedrijf:

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Adres waar de student zal werken: Hof ter Weze 3, 8800 Roeselare

Kort (min 120 uur) of lang (min 200 uur): ~~kort~~ / **lang**

Korte beschrijving van de opdracht:

For a specific project, we would like to use valuable information from multiple sources (e.g., a regular RGB camera and an additional lidar). However, the information from these sensors needs to be perfectly aligned. To get a good mapping between sources, extensive 3D calibration is required.

Map information from different sensors (visible light, ultra-violet, infra-red, radar, lidar) onto each other in 3 dimensions.



Compare early vs. late sensor fusion for deep learning on the calibrated input.

Methodology

First, a generic way of storing the information from different sensors needs to be found.

Second, calibration needs to be performed such that the output of the sensors is perfectly mapped onto each other in 3D.

Next, train a 3D deep learning network and compare late vs. Early fusion.

Technologieën die aan bod zullen komen:

Computer vision, sensor fusion, lidar, radar

