BB PROJECT POLITIE:

COMPUTER VISION FOR OBJECT DETECTION

In the Netherlands, and around the world, politicians, lawyers, witnesses of crimes are threatened by criminals and thus need personal protection from Police, either temporarily or continuously. Examples within the Netherland are in 2019 murdered lawyer Derk Wiersum, last year (2021) tragically murdered crime journalist Peter R. de Vries and politician Gert Wilders that is continuously under Police protection. Those are only a couple of examples. When, afterwards, Police looks at video images of crime place and surroundings, suspicious behavior, specific patterns that criminals show prior to commit the crime, are recognized. If those patterns could be detected beforehand by using of technology, that would mean that a crime can possibly be prevented.

The goal of this project is automatic detection of suspicious behavior by using information collected around protected person to signal possible thread. In particularly, video images are collected and available, and specific scenarios that need to be detected are defined.

We are looking for an enthusiastic SE student(s) that can help us, using video images, detect specific objects (people, vehicles, etc.) withing video images. You will be working with researchers from Ambient intelligence and data scientist from Police.

If you think this project suits your interest, please do not hesitate to contact us.

TASK DESCRIPTION
- Use a test bench dataset to develop an algorithm which can detect various objects in in different scenarios using video images (eg, a person, a car, etc.)
- Test the model for a collected data set. Since the test bench dataset might be for another scenario, the validation tests should be performed for the collected specific data sets

PRACTICAL INFORMATION
- Student profile: internship student with an affinity towards computer vision and deep learning algorithms, Big Data specialization students, Graduation student with Big data specialization background
- Contact person(s): Tatiana Goering <t.s.goering@saxion.nl>
- Lectoraat Ambient Intelligence: saxion.nl/ami