

## **Computer vision assignment:**

Thanks for taking the time to work on this task!

Please send back your results in 7 days from the day you receive this document, and don't spend too much time on it.

If you need extra days, email me at <a href="mailto:andrea.maestri@tectwin.com">andrea.maestri@tectwin.com</a>.

Together with this document, you will receive a video of moving vehicles.

The goal of the assignment consists of:

- 1) Detect every vehicle in the video.
- 2) Detect moving vehicles.
- 3) Approximately measure their speed (This is a bonus!)
- 4) Create a Flask (use the framework you are more comfortable with) service where you will receive the videos as a POST request. The response will have to be the number of vehicles detected, how many of those are moving, and if you finished point 3, return the average speed of the ones moving. (This is also a bonus, and we mean it, don't spend on the assignment more time than you should)
- 5) Visualise/report the results from your model in the way you think it is most suitable for this task, regardless of whether you finished point 4 or not.
- 6) Write a short documentation that we can use to replicate your results.

For us, this assignment is important to see how you work and how you approach a computer vision task. *You will not be judged if the model doesn't perform extraordinarily well*, as we don't want you to waste time on extra training or labelling.

Using an existing open-source model, one you created in the past or modifying an existing one it's up to you and that's not important for us at this stage.

Have fun with it, and let us know if you need any help.