

**Try TIES 4911 (2024): Guidelines for the Task 5**

**Your surname:**  
**Your first name:**



Study lecture materials... Refer to the examples in the materials to complete following sub-task(s):

**Task 5-1:** Try and compare different Object Detection and Image Segmentation approaches: YOLO (try different versions), SSD, RetinaNet, FasterRCNN, MaskRCNN, U-Net, Yolact, etc. Prepare a set of test images (e.g. 10), put results and performance comparison into report. Please, do not forget to mention corresponding implementation for the model you have been used (links, etc.)

**Task 5-2:** Play with image style transfer on your own image set.

**Task 5-3:** Think about useful Computer Vision based use-case or service. Describe and illustrate the idea. Try to define requirements (e.g. dataset, labeling, model, etc.) and implementation plan. Prepare to present the idea to the course participants. We will vote for the best ideas and presentations. 😊

Files to include in the demo results (archive file [ties4911-task05-\(your\\_surname\).zip](#)):

- *Task5-instructions.doc (this file)*
- *PPT presentation with relevant information (e.g. data, links, performance screenshots, sketches of the idea(s), etc.)*
- *source codes*

Send the results as an archive to lecturer (oleksiy . khriyenko @ jyu . fi) before the deadline (end of 07.03.2024).

Results should be present during the Demo-5 Session. Be sure that you have all the necessary adapters to connect your computer in the classroom (if applicable).