

Practise session 1: Machine Vision Basics, recalling Matlab

1. Requirements for a successful machine vision application: explain important factors using two different points of view: product developer's point of view and the end user's point of view. (1p)
2. Fundamental steps in a machine vision system: explain which kind of vision (imaging, image processing and image analysis) would be important and necessary in the implementation of one specific machine vision application. As an application example you use any of the examples we have met in the lectures. You may select also other examples and consider the requirements for that. (1p)
3. Current research topics in the field: find a recent (this year) issue of a scientific journal in the field (e.g. Machine Vision and Applications), and give a summary about the topics in this one issue. (1p)
4. Current research topics in the field: find a recent (this year) conference in the field (e.g. Scandinavian Conference on Image Analysis (SCIA), ICPR, ICIP), and give a summary about topics (tracks, sessions, etc.). (1p)
5. Matlab introduction: find a computer with **matlab** (e.g. Linux class 6218), and familiarize yourself with the software using the tutorials found from the Matlab system. For example, check the functions which are available in the "Image Processing Toolbox". This is just to recall how to use Matlab (no presentation in the exercises). (1p)