

# Classifier Ensembles

The Exam

**Option 1.** You will pass if you submit *passable* solutions to all questions and problems in Lectures 1-7 (puzzles included, Internet resource is allowed).

Notes: The first problem in Lecture 5 is particularly difficult, so I will accept just your thoughts or an example of that. The Matlab Challenge (Lecture 5) may not be your cup of tea, I understand... You can leave that aside - a solution of that challenge is not required (or maybe you will amaze me with a brilliant solution?!) The problem in Lecture 6 is not terribly complicated but requires some background in probability. If you don't feel you can crack it, don't worry. Just have a go.

**Option 2.** Prepare a paper (up to 3 A4 pages) with title "Classifier Ensembles for ...", where you fill your own research topic. For example, your paper title could be "Classifier Ensembles for Detection of Network Anomalies". The paper should contain your name, affiliation and e-mail address, a set of 5 keywords, and the text. Start with an Introduction, where you describe the problem you are working on. Then include a section about classifier ensembles for that problem. Don't introduce classifier ensembles; assume that the reader is familiar with these. Explain there what aspect of classifier ensembles is relevant for your problem, cite literature sources, and give a critical comment about the current state-of-the-art. The paper must have at least 10 references, where at least 3 should be from year 2007 or later (not all references have to be related to ensembles, of course!). Keep this section clear, consistent, right to the point and well structured. The last section can be called "Perspectives". Explain how you see the advances of the area as a result of applying classifier ensembles. Give the expected contributions from the work you are doing if you have clarity on that issue. In the last paragraph, let your imagination run wild and give a speculation about the future of your area, say, in 10 years time. (This is not how you should be finishing your research papers - this is just for me to have fun while marking your papers.) Formatting of your paper: font size 11pt or 12 pt, 1 inch margins on all sides.

*Writing tips:* About 15 words per sentence - try to adhere to that as much as you can. Don't waffle! I will mark your work down for waffling. Make every effort to write your paper in good English; ask friends and colleagues for help if you feel you need it.