

T-61.3030 Principles of Neural Computing

Period IV, Spring 2007

Lecturers: D.Sc. Kimmo Raivio

D.Sc. Markus Koskela

Assistants: M.Sc. Matti Pöllä (exercises)

M.Sc. Matti Aksela (computer project)

Materials and language:

- The lectures and exercises will be given in Finnish.
- However, the course textbook and exercise materials will be in English.
- Exam requirements and homepage are in English, too.
- Solutions of problems will be available in copied course material.

General information

- 5 new credit points.
- Corresponds to old course T-61.261
- Course cannot be included in postgraduate studies any more
 - If you planned to include it in postgraduate studies please contact the lecturer.
- To pass the course you should pass the exam and do the computer project
- **WWW:**
<http://www.cis.hut.fi/Opinnot/T-61.3030/>
http://www.cis.hut.fi/Opinnot/T-61.3030/index_en.shtml
- **Newsgroup:**
`opinnot.tik.informaatiotekniikka`

- **Registration:**

- You should register on course using TOPI system:

- <http://webtopi.tkk.fi>

- **Lectures:**

- Tuesdays 12-14 and wednesdays 12-14 in lecture room T1.

- Almost the same as on previous years.

- **Exercises:**

- Thursdays 12-14 and fridays 10-12 in lecture room T1.

- The same as on the last year's course.

- Course assistant: **Matti Pöllä**, room B332.

- The first exercises are on 15th March.

- Problem sheets are available from the course home page.

- **Computer project:**

- Assistant: **Matti Aksela**, room B330.
- 4 different topics, choose one according to the last number of your student id.
- You should have enough knowledge to do this project in late April and in May.
- Deadline xxst May 2007

- **Examinations:**

- 4 exams in a year
- First exam on Monday 14th May, 13-16, lecture room C.
- One exam in the beginning and one in the end of fall 2007, one in spring 2008.
- Problem sheets are in finnish and in english.

- **Course textbook and coverage:**

- S. Haykin: *Neural Networks - A Comprehensive Foundation*, 2nd ed., Prentice-Hall 1998.
- Graduate level; but more difficult parts are not discussed in this basic course.
- Only Chapters 1-5 and 9 of this large textbook are discussed in this basic course.
- You can copy these chapters from master copies located in secretary Tarja Pihamaa's room B326.

- This course is lectured last time this spring.