Free Study Activity - Fall 2010

NumPy for Scientific Computing

- a free alternative to Matlab

The aim is to introduce the NumPy software tools for scientifical computing. Focus will be on learning the environment, performing simple calculations, processing data and creating publishable figures.

- Installation of all necessary software and introduction to the development environment.
- Data and container types, logical test, basic and advanced math functionality.
- Creating plots of different types, changing layout and exporting figures.
- Scripts, loops, functions, classes, modules, importing and saving data.
- Linear algebra functionality, basic image processing, statistical functionality.

Applications using Qt

- a cross platform programming environment for C/C++

The aim is to enable students to build up knowledge in Qt in order to facilitate the use as a basic tool for their projects. Furthermore problems related to cross platform and programming for mobile phones are highlighted.

- General introduction to Qt
- Qt development, examples and applications
- Qt tools and developer suite
- Qt for mobile:
  - Overview and Introduction to mobile world
  - Using Qt for mobile platforms
  - Qt Mobility APIs (using the phones functionality)
  - Getting the applications installed on the phone

Time (Wednesday afternoon): 27th October, 3rd, 10th, 17th, and 24th November. (It will be possible to sign up for both courses - time division multiple access will be used ;)). Exact time and location will be sent per email.

Sign up and additional questions:

- NumPy course: jah@es.aau.dk (Janus Heide)
- Qt course: mvp@es.aau.dk (Morten V. Pedersen)