

# Embedded Motion Control 2012

## PC Configuration and Tools

Sjoerd van den Dries

April 23, 2012

- ▶ Ubuntu
- ▶ C++
- ▶ Robot Operating System (ROS)
- ▶ Eclipse
- ▶ Subversion (SVN)
- ▶ Wiki

- ▶ Linux-based operating system
- ▶ Use version **10.04** (Long Term Support release)
- ▶ 32- and 64-bit
- ▶ Easy dual boot installation with e.g., Windows
- ▶ Download: [www.ubuntu.com](http://www.ubuntu.com)
  - Any problems? → [Check the wiki](#).
  - No info? → Ask the ICT Servicedesk or mail us.

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- Object-oriented C
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## ▶ ROS

- Robot Operating System
- Open-source software framework
- Communication and management, libraries
- Different languages: C++, Python, Java, Lisp, Prolog, ...

- ▶ Integrated Development Environment
- ▶ Developed for Java, but extended to C++, Python, ...
- ▶ Many advantages over 'simple editors':
  - Syntax highlighting
  - Auto-completion
  - Visual compiler feedback
  - Project management
  - Content assist
  - ...

- ▶ **Version Control System:**
  - *'Manages files and directories, and the changes made to them, over time'*
- ▶ Use to store and maintain your code on the server
- ▶ **Basic commands:**
  - `svn checkout <URL>`
  - `svn add <FILENAME / DIRECTORY>`
  - `svn commit -m '...message...'`
  - `svn status`

▶ **EMC Wiki:**

- [http://cstwiki.wtb.tue.nl/index.php?title=Embedded\\_Motion\\_Control](http://cstwiki.wtb.tue.nl/index.php?title=Embedded_Motion_Control)
- Info on practical assignment, installation, getting started
- **Log-in: student account**



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▶ **Overall use:**

- Everyone can **edit**
- If you see a mistake: **correct it**
- If you had a problem and know how to fix it: **add it**

Questions?