

# Open-Source Programming

Project presentation

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# Linux kernel

- Serves as a kernel in the GNU/Linux operating system
- Is the most used OS kernel in the world
  - Runs on devices such as cell phones (Android OS), network routers (D-Link, Linksys, ZyXEL, Turris Omnia, ...), web servers, NASes (Synology, Qnap), multimedia centers (LG), desktop computers
  - and Pocket PCs and many more

# Linux kernel

- How to use it
  - git clone  
git://git.kernel.org/pub/scm/linux/kernel/git/torvalds/linux.git
  - make x86\_64\_defconfig ARCH=x86
  - make
  - Bootloaders: U-Boot, GRUB

# Linux kernel

- Written in C and assembly
- Large code base of approx. 20 millions LOC
- Contains preemption support, although not intended for hard realtime applications
  - rt-preempt patches

# My work

- Resolve bugs affecting user experience with HP iPAQ hx4700 Pocket PC
- First bug (actually a regression) in *voltage regulator* subsystem
- Second bug in *cpufreq* subsystem

