

# Gwenolé Beauchesne

<gb.public@free.fr>

ENGINEERING MANAGER, OPEN SOURCE DEVELOPMENT

## Work Experience

- **Mandriva** Paris, France  
*Engineering Manager, Core Labs* *Feb. 2006 - Jun.2007*
  - Manager of the Core Labs unit (approx. 15 people). The group consists in Core Engineering, HW Quality Assurance, HW Enabling. In direct relation with key partners like AMD, Intel, ATI, nVidia.
  - Continue to maintain the compilation toolchain.
  - Continue to lead the development of Mandriva Linux ports (Cell, ia64, x86-64).
  
- **Mandriva** Paris, France  
*Team Leader, Core Engineering* *Jan. 2004 - Jan. 2006*
  - Manager of the Core Engineering team (approx. 5 people). The group is in charge of low-level projects at Mandriva: compilation toolchain, localisation and internationalisation, kernel, Linux Standard Base (LSB), ports to non-x86 architectures.
  - Maintainer of the compilation toolchain.
  - Architect and lead developer of 64-bit Mandriva Linux distributions (ppc64, x86-64).
  
- **Mandriva** Paris, France  
*Software Engineer, Core Engineering* *Jul. 2001 - Jan. 2004*
  - Former maintainer of OpenOffice.org.
  - Maintainer of the compilation toolchain: binutils, gcc, glibc.
  - Architect and lead developer of 64-bit Mandriva Linux distributions (ia64, x86-64).
    - \* Adapt installer to the new architecture needs and create ISOs.
    - \* Review and fix programs generally from build logs and code inspection ; covering 64-bit issues, multiarch, ISO C and ISO C++ compliance.
    - \* Port small to large scale applications like the Kaffe JVM, Dietlibc, Mozilla, OpenOffice.org.
    - \* Developed Mandriva Linux multiarch solution for 32-bit run-time and development on x86-64 platforms.
    - \* Developed one of the first 64-bit Linux distribution available to the x86 architecture.
    - \* Gave talks about software porting to 64-bit architectures at the AMD Developer Symposium 2002 (Frankfurt, Germany), and Linux Solutions 2003 (Paris, France).
  
- **IRISA** Rennes, France  
*Intern, CAPS* *Jul. 2000 - Aug. 2000*
  - Worked within the Compiler and Architecture for Superscalar and embedded Processors (CAPS) group at IRISA, a public funded Research Institute in Computer Science.
  - Developed a retargetable graph coloring register allocator in C++.

## Personal Projects

- **NSPluginWrapper** *2005 - Present*
  - Author of nspluginwrapper, an Open Source NPAPI plugins bridge.
  - This makes Adobe Flash Player and other 32-bit x86 plug-ins run in Linux/x86-64 or non-Linux/x86 browsers.
- **SheepShaver** *2003 - Present*
  - Contribute to SheepShaver, an Open Source PowerMacintosh emulator.
  - Author of the first PowerPC G4 CPU emulator with just-in-time translation.
- **Basilisk II** *1999 - Present*
  - Contribute to Basilisk II, an Open Source Macintosh 68k emulator.
  - Integrated and improved a high-performance JIT translator. Ported the JIT to x86-64.

## Education

- **Institut National des Sciences Appliquées** Rennes, France  
*Master of Science in Computer Science* *1998 - 2001*
- **Institut National des Sciences Appliquées** Rouen, France  
*General engineering studies* *1996 - 1998*
- **Lycée La Mennais** Papeete, French Polynesia  
*Baccalauréat Sciences (equivalent to A levels)* *1996*

## Skills

- **Foreign languages**
  - French: native speaker.
  - English: fluent written, good level oral. TOEIC score: 810/990.
- **Other experience**
  - Very experienced with dynamic binary translation.
  - Very experienced with ISO C, ISO C++, Shell scripting (Bash).
  - Experienced with a number of processor architectures and instruction sets including 680x0, PowerPC, SPARC, x86, x86-64.
  - Familiar with Perl, Python, L<sup>A</sup>T<sub>E</sub>X.
  - Familiar with data compression algorithms.
  - Personal server administration: LAMP, RSBAC, Subversion.
  - Early-access and build experience with Sun Java Hotspot VM.
  - Academic skills: microprocessor design and architecture, operating systems, parallel and distributed computing, software engineering, graphs algorithms, dynamic and constrained programming.