

## Maxime Chéramy

10, allée des Sciences Appliquées, App 1508 R2  
31400 Toulouse, France  
Phone : +33 6 89 08 19 92  
E-mail : maxime@cheramy.net

## Education

- 2011 –** **PhD student** at LAAS/CNRS.  
Evaluation and implementation of real-time multicore scheduling policies in the context of embedded systems for the cars.
- 2006 – 2011** “**Ingénieur en informatique**” (equivalent to **Master's degree in Computer Science.**)  
at the Institut National des Sciences Appliquées de Toulouse (INSA Toulouse), a French reputed engineering school.
- 2006** “**Baccalauréat Scientifique**”, french High School diploma in Sciences with honours “Good”.  
**Specialities:** Mathematics and Engineering Sciences.

## Work experience

- Feb – Jun 2011** **Google, Zürich, Switzerland**  
In the Internationalization Team, I developed a prototype for YouTube to improve the quality of the translations. Using **JavaScript** and **Python**.
- 2007 – 2011** **Centre de Ressources Informatiques (CRI) de l'INSA, Toulouse, France.**  
- The CRI is the center in charge of all the computer infrastructure of my school. After expressing my will to provide better services for the students, they proposed me to become **system administrator** of the students' server. I am coordinating the work of a team of five students with the CRI engineers. The server mainly provides for the students :  
- Web pages hosting (Apache, PHP, MySQL)  
- Webmail (Horde/IMP, Roundcube)  
- Project managing (Subversion, Redmine)  
- Instant Messaging (Jabber/XMPP)
- Jul – Sept 2010** **University of Reading, UK.**  
With the polymer group at the Mathematics department, I developed a polymer visualizer for a simulation program conceived by this research group. Through this project, I have learnt how to use **OpenSG** (an OpenGL scene graph) and **Qt**. I also improved my **C++** skills.
- Jul – Aug 2009** **Atos Origin Integration, Toulouse, France.**  
- I studied the adequacy of the telemetry decommutation Framework **OCTAVE** to implement the simulator control center for the CNES stratospheric balloons. (Centre National d'Études Spatiales, the French space agency)  
- Using **Java** and Swing, I developed the user interfaces for the simulator and I also worked on connecting a satellite modem driver to a **CORBA** bus to be used by OCTAVE.
- Jul – Aug 2008** **Linagora GSO, Toulouse, France.**  
- Web development in **PHP** for a corporate web portal. I added several features, fixed bugs and split the different modules from the application for better modularity and reusing. I also worked with the CMS Drupal.  
- Setup of a **mail server** with authentication based on a LDAP directory secured with TLS encryption.  
- Setup of several Intranet servers in Virtual Machines (LDAP, CAS, Apache, Samba, Cyrus...) to provide a testing environment.
- Jun – Aug 2007** **Linagora GSO, Toulouse, France.**  
- I installed a complete **mail server** (Debian Linux, Postfix, Cyrus, Horde/IMP) for the veterinary school of Toulouse.  
- I studied **virtualisation systems** and in particular Linux-VServer to provide some documentations on the subject. Then I developed scripts in Bash to facilitate the use of Linux-VServer in aim to be used for a hosting server of web services.  
- Finally I also did a lot of miscellaneous tasks (Perl scripting, Linux installations, hardware upgrades...).

## Other development experience

- 2010 - 2011** **Operating System : TacOS**  
TacOS is an operating system (for Intel x86) that I developed with 4 friends. I worked on several parts of the

project including interruptions, paging, streams management (libc), text display and file system (FAT). Almost all the whole OS has been implemented using **C**. The aim of this project was mainly to learn more about OS design.

#### **2008 – 2010 File sharing software**

Using **Java** and the graphical toolkit SWT and my OOP skills, I built a file sharing application for local networks based on the SMB and FTP protocols. This software allows the user to search, download and share files directly within the application. It has been successfully used by more than 350 simultaneous and heterogeneous users at the same time sharing the same network. The application contains nearly 100 java classes and more than 15000 lines of code.

#### **2010 SuperFlu**

SuperFlu is a video game developed in only one week in a team of 4 developers and 1 graphist. In this short time we managed to define the game play, to do the conception using **UML** methodology and of course to implement it. This game has been developed using **Java** and OpenGL and it can be played up to 6 players in a network. The aim of this game is to sensitize people of the importance of a good international cooperation to fight against a pandemic.

## **Responsibilities**

#### **2008 – 2010 “Conseil d'Administration des Ressources Informatiques” (CARI)**

Elected at the CARI. The aim of this group is to organize the computing policy for the engineering school and build a budget taking into account the technical, financial and human aspects.

#### **2007 – 2010 Cod'INSA**

I am an organizer and one of the founders of Cod'INSA, a programming contest with up to 80 contestants each year from 5 different engineering schools. I am in charge of the relations with our sponsors and of the organization of the qualification phase in my school. <http://codinsa.insa-lyon.fr>

#### **2006 – 2009 Computer Science Club**

In charge of the Computer Science Club of my engineering school: I organized activities for the students such as programming teaching, programming training for contests, LAN parties (60 players) and a lot of other activities to promote computer science.

## **Languages**

**French** Native Language.

**English** Able to work in an English environment, **955/990 at TOEIC test** (2009).

**Spanish** Beginner.

## **Technical skills**

**Desktop Programming** - Strong UML and OOP methodology  
- Strong knowledge in **C, C++ and Java**. Good knowledge in **Ada** and **Python**.  
- Functional programming in oCaml (basic knowledge)

**Web Programming** - Good knowledge of **XHTML, JavaScript, PHP and MySQL**  
- CMS: Drupal

**Unix systems** - Strong experience of **Linux** systems  
- Shell programming (Bash)

**Networking** - TCP/IP: Java, C and C++ socket programming  
- Very strong knowledge of the **Jabber/XMPP** protocol

### **Contests:**

- **2010** : Finalist at the Google AI Challenge organized by the University of Waterloo Computer Science Club : an international programming contest on the Internet. My rank : 41<sup>th</sup> on approximatively 1400 contestants (3<sup>rd</sup> French).

- **2007** : Contestant at the Eurobot with the INSA team (work in team of 15 students). Eurobot is an international amateur robotics contest. <http://www.eurobot.org>

- **2007** : Finalist at Prologin : a national programming contest. My rank : 18<sup>th</sup> on approximatively 1000 contestants. <http://www.prologin.org>

- **2004,2005** : Contestant at the Eurobot with my high school team (work in team of 10 people).