# Leandro Matías Lucarella

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Location: Berlin, Germany

Nationality: Argentine with Italian citizenship

**Birth:** 1979-02-15 **Updated:** 2013-02

## **Profile**

Versatile developer with a wide range of application coverage (from base library and system programming in low-level languages to graphic and web applications in high-level languages; enjoying the most working in the former).

Proactive self-taught, able to work on own motivation or as part of both small or big teams, specially using FLOSS (Free *Libre* Open Source Software) development methodologies and tools. Good skills and interest in working on distributed and concurrent systems design and implementation.

## **Skills**

- Programming languages theory with deep practical knowledge of modern C++, C and Python.
- Concurrent and network programming, including POSIX threads, BSD sockets, TCP/IP and TIPC (Transparent Inter Process Communication) experience.
- VoIP knowledge (specially H.248).
- Object-oriented design and programming.
- Shell scripting and Linux system administration and performance tunning.
- Training people on programming topics.

# **Achievements**

- Founding and actual member of LUGFI (2002) and LUGMEN (1998) Linux/FLOSS users groups, making several conferences.
- Publication of several articles on the web (1999-2005). Two of them were published on Linux Free Magazine, year 1, number 1 (2003).
- Several collaborations to popular FLOSS projects including (but not limited to):
  - Linux (2001) [C]: Bugfix in bttv module for Leadtek WinView 601 TV card.
  - LIRC (2002) [C]: Debug of lirc\_gpio module.
  - xmi2code (2003) [C++]: Added PHP support and other minor features.
  - dia2code (2003) [C]: Added PHP support.
  - SQLObject (2006-2007) [Python]: Minor features and bugfixes.
  - TurboGears (2006) [Python]: Minor features and bugfixes.
  - Gnomad2 (2005) [C]: Minor GUI improvements.
  - DMD (2008-now) [C++/D]: Minor improvements to the compiler and runtime.
- Creation of several small/medium sized FLOSS projects as part of a team:

- Hooks framework for LUGFI and LUGMEN websites (1999-2004) [PHP, Apache, MySQL]: Development and maintenance of both websites (programming and sysadmin).
- Etherled (2005) [C, ASM]: A remote controlled, programmable stroboscopic image projector device using a 8051-family micro-controller, including an ISA NE2000 compatible network adapter driver and a small, custom IP/UDP stack.
- Sercom (2004-2009) [Python, SQL]: An automated compilation and testing system for programs written in C/C++, including a security-aware backend process to compile and test in a sandbox.
- Pymin (2007) [Python]: A Linux router administration tool based on a daemon server with client/server infrastructure.
- eventxx (2007) [C++]: A thin C++ wrapper for libevent.
- ev.d (2008) [D]: A thin D wrapper for libev.
- mutest (2008) [C, C++, Python]: A simple micro unit testing framework for C and C++.

# **Experience**

### Freelance independent professional (1997-date):

Later works include small websites development and the backend deamon (written in Python) for a Linux router administration application.

#### Ministerio de Economía Internship (2001-2004):

LAMP (Linux, Apache, MySQL, PHP) web development and some Linux system administration.

### My Way (2004):

LAMP web development and some Linux system administration.

### Facultad de Ingeniería, Universidad de Buenos Aires (2004-2009):

Assistant teacher, teaching programming topics covering C, C++, POSIX threads, BSD sockets and GTK+ GUI and more.

#### Integratech S.A. (2006-2011):

Development and maintenance of a monolithic (carrier grade) *softswitch* (H.248 in particular). Design and development of a new modular and distributed version of the *softswitch*.

#### sociomantic labs GmbH (2011-date):

Development of a high performance, distributed real-time bidding platform. Linux server tunning for high load situations.

# **Education**

### Colegio Nacional de Buenos Aires, Argentina (1992-1997):

Secondary school diploma, specialized in science, technology and design.

#### Facultad de Ingeniería, Universidad de Buenos Aires, Argentina (1998-2010):

Informatics Engineering. Thesis: Garbage collection in the D programming language.