# Leandro Matías Lucarella

E-Mail: luca@llucax.comWeb: https://llucax.com/Location: Berlin, Germany

Nationality: Argentine with Italian citizenship

**Birth:** 1979-02-15 **Updated:** 2018-04

GitHub User: Ilucax / leandro-lucarella-sociomantic

# **Profile**

Versatile developer and technical lead with focus system and network programming, library development, developer tooling in both low-level system programming languages and scripting high-level languages.

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. Able to balance good practices with business requirements; focus on keeping systems as simple as possible, but as complex as needed.

# **Skills**

- Programming languages theory with deep practical knowledge of D, Python, Bash (also worked quite a bit in C/C++ in the past).
- Concurrent and network programming, including POSIX threads, BSD sockets, TCP/IP and TIPC experience.
- Test automation (touching several systems, including Jenkins and Travis, and using Docker for isolation and reproduceability).
- Multi-paradigm design and programming with focus in simplicity.
- Shell scripting and Linux system administration and performance tunning (focus on Debian based distros).
- Training people on programming and technical topics.
- · Open source projects management.
- Releases management.

# **Achievements**

- Founding of two Linux user groups, LUGFI (2002) and LUGMEN (1998), 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:
  - 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++.
  - git-hub (2013-) [Python]: Git command line interface to GitHub.
  - makd (2016-) [Shell, Python, Make]: A Make library/framework to build D projects.
  - neptune (2016-) [D]: Release process management documentation/spec + supporting tools.
  - beaver (2017-) [Shell]: Shared Travis scripts to be used to reduce CI boilerplate.
  - Management, contribution and.or reviewing of several other projects of the sociomantic-tsunami organization.
- Presented a talk (Concurrent Garbage Collection for D) at DConf13 and gave a Keynote at DConf16.

# **Experience**

## Freelance independent professional (1997-2011):

Mostly 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 [Software Developer] (2011-2013):

Development of a high performance, distributed real-time bidding platform (in particular involved with the recommendation system and in-house database engines (DHT, DLS, DMQ). Migration from Subversion to Git (GitHub) introducing peer review. Linux server tunning for high load situations.

### Sociomantic Labs GmbH [Technical Development Lead] (2013-):

Technical support for a team of ~30 (grown from ~5). Development of tools for developers. Managing of development infrastructure (testing, Debian repositories, Docker images, etc.) and

setting processes for development, testing, releasing and deployment for a team of ~60 (grown from ~10). Managing the open sourcing programme (sociomantic-tsunami). Migration from D1 to D2.

# **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.