

Experienced and passionate Computer Scientist and Free Software Developer looking for new challenges.

Niv Sardi,

October 11, 2012

Education

2006-2007 Maths and Computer Science Masters :Paris:flagFR:

Université Denis Diderot: Maitrise de Mathematiques et d'Informatique

- **Project** : MiniOCaML interpreter (2 members team - **CaML**)
- **Research**: Big Social Networks Topology — Graph analysis of Flickr (**Perl & C**)

2005-2004 Maths and Computer Science Bachelor :Paris:flagFR:

Université Denis Diderot: Licence de Mathematiques et d'informatique

- **Project**: Suffix Arrays, Algorithms, Analysis and Implementation (**C**)

2003-2004 1st year of Engineering :Paris:flagFR:

ESME Sudria: 1re année d'Ingenieurie

- **Project**: Digital Luxmeter (3 members team - **PIC Assembly**, Electronics)

2001-2003 Preparatory School :Paris:flagFR:

ESME Sudria: Classes Préparatoires

1998-2001 Scientific Baccalaureate (A-Level) :Aubagne:flagFR:

Lycée Joliot Curie: Baccalaureat Scientifique

Skills

Languages

C, Fortran, (E)Lisp, sh :advanced:

C++, Java, Assembly, CaML, :basic:

Python, Perl :intermidate:

Spanish :advanced:

mother tongue

French :advanced:

father tongue

English :advanced:

lived and worked 2 years in Australia

Travels :basic:

During my travels I picked up bits of German, Japanese, Cantonese, Mandarin, Malay, Thai and Lao

Networks

**Ethernet, 802.11, TCP/IP, IPv4/IPv6, Firewalling, POTS, VoIP (SIP/H323)
:intermidate:**

**Servers Web, Mail, FTP, DNS, DHCP, LDAP, PBX, (My/PostGre)SQL
:intermidate:**

Web

(X)HTML, CSS, Javascript :advanced:

PHP, (Perl) CGI :intermidate:

Latest Work Experience

2012 Technology Comission: :corpINAES:BuenosAires:flagAR:

Open Technology for a socially responsible Nation

The INAES (Instituto Nacional de Asociativismo y Economía Social: National Institute for Associativism and Social Economy) is a bureau of the Ministry of Social Development, it's main goal is to promote and regulate the Cooperatives and Mutuels of Argentina.

The Comission I'm directing is working on promoting the developement of startup-like high tech cooperatives.

We advance on this goal mainly by:

- Market analysis and detection of possible nest for coops.
- Contacts with universities and their incubators to spread methodologies and techniques.
- Coordination with active tech coops and small businesses to detect those that have the potential to get into high-tech.
- Free Consulting with coops and coops projects.

Work Experience

2011-2012 R&D FLOSS Consultant: :corpCOVETEL:Caracas:flagVE:

FLOSS transformations for Governments and National Corps

I joined the covetel.com.ve cooperative to give a hand on their various free software projects. essentially on:

- Processes Optimization:
 - Designed and Installed a new Git Workflow based on Gitolite.
- Debian Packaging automation:
 - Developed a set of tools on top of DebHelper to ease out the creation of configuration packages (that Covetel Shipped to it's customers).
- Adapt Canaima (The National GNU/Linux Distro) to the need of CanTV (National Telco).
 - Refresh the Canaima Building tools (30+ Patches merged).
- Audio/Video Streaming.
 - Designed and Deployed a Streaming Solution based on VLC and FFMPEG to get a regional TV channel from one head to another across a small wire (x264).

2011-2012 R&D FLOSS Consultant: :corpCROLL:London:flagGB:



mance Ninja & BT master

As a consultant for CROLL I worked with the vo.do team essentially on:

- Filesystem Performance:
 - Install and tune XFS filesystem for optimal performance for tracker workloads.
- BitTorrent Tracker:
 - Replace running solution to a much less resource-hungry one with 0 downtime.
 - Patch OpenTracker for in-house need.
 - Design, Implement and Deploy a python daemon to ease-in tracker workflow.

Perfor-

- Processes:
 - Audit and normalize development process.

2011 Hacking Educator: :corpENVION:BuenosAires:flagAR:

Hacking for the (socially excluded) masses

The Social Inclusion Office of the Avellaneda city gave me a white card opportunity to run a little experiment in Isla Maciel (socially excluded neighborhood). The goal of the bi-weekly sessions is to get kids to understand and ingest elements of the hacker culture. I believe that the thought process we explore will give them new tools for their daily lives, a better understanding at a pool of technologies they are immersed in, and hopefully get some interested enough to build a viable professionalization option.

During those meetings, I use FLOSS for:

- Technological Appropriation Process:
 - Getting participants to understand that technology is palatable.
 - de-mystification of tools they use on daily basis.
 - Search-Hack-Remix.
- Computer Security Introduction and Self-Awareness:
 - Explore different attacks, their consequences and possible risk-minimization policies.
 - Basic Cryptography.

2011 R&D Software Engineer: :corpCROLL:Paris:flagFR:

Embedded Linux

As a consultant for CROLL I was integrated inside the 'LATAM' team, of Sagem. This section was selling consulting to Telefonica in Chile, Peru, Venezuela and Brazil.

There I focused on integrating **Open Source Tecnics and Methods** into the Corporate Workflow.

2009-2011 R&D Software Engineer: :corpCROLL:Paris:flagFR:



Video, Streaming & Broadcast

Audio,

As a consultant for CROLL I was integrated inside the ‘Core’ team, of the SmartJog TDF division to work essentially on:

- «In House» **FFMPEG** Maintainer.
 - Patch for Broadcasters specific features.
 - Reverse Engineering of media Formats (MXF, XDCAM, . . .)
 - QA, tests, stability.
 - Back/Forward-Porting between FFMPEG, FFMBC and HEAD.
- «In House» **Icecast** Maintainer.
 - Patch to add new streaming formats (FLV).
 - Code Auditing for Performance and Scalability.
 - Massive code cleanup (30+ patches sent to icecast-devel).

On the side, I got involved in a par of other projects:

- Porting/Fixing DVB drivers (C Kernel Linux).
- Designing and Developing a test framework for the internal Transcoding/Wrapping tool (Python, C).
- Optimize internal development processes (SCM, Release Management, Workflow and tools).

2007-2009 R&D Software Engineer: :corpSGI:Melbourne:flagAU:

Linux Kernel Filesystem

I joined the SGI File-Systems R&D group in Melbourne to work mainly on the XFS File-System.

- DMAPI (Data Storage Management API) maintainer.
- Parent Pointers feature for XFS.
- Wrote a File-System torture suite (C).
- Migration of the source control from a closed source internal tool to Git.
 - Wrote a set of scripts to migrate the old content to Git and keep the old SCM up-to-date when working in Git (Perl).
 - Wrote documentation, gave presentations to the group and orchestrated the Git transition.
- Maintained large patchsets between dierent versions of the Linux Kernel.
- Linux Community interaction, via Mailing-Lists and Real-Life events.

2007 Embedded Linux Engineer: :corpOPENWIDE:Paris:flagFR:

Embedded Userland, Kernel Drivers & RT-Linux

Open Wide is the leading open source specialist in France. Open Wide OS4I provides consulting, engineering, support and training services to a wide portfolio of clients from specialized medium companies up to the Fortune Forty. My diversified missions brought me to:

- Conceive, develop and deploy Embedded Systems build process and software architecture (C, Python, Perl, Make, Shell).
- Linux Kernel Hacking:
 - Kernel Device drivers (mainly Flash Devices/MTD).
 - Fix bugs in code written by others (on Real-Time & Embedded Systems).
 - Port code between different versions of the Linux kernel.
 - Study of the LTT and PREEMPT_{RT} Patches-sets
- Develop QA tools for Embedded Systems build process (Perl, Python).
- Debug and Optimize code for size and performance (C).
- Re-implement core components of the embedded system (Low Level C).
- Write Documentation, and make commercial presentations.

2006 VoIP Consultant: Assekuransa :BuenosAires:flagAR:

VoIP Interconnection

I realized various missions in the IT departement of Assekuransa:

- Advice and design of Postfix transports (Perl).
- Design and Deploy a VoIP solution between their Mexican and Argentinian office (Asterisk, SIP Phones).
- Develop a Monitoring and Reporting tool for their local Hardware PBX (Perl, DBI/SQL).

2006 FLOSS Consultant: SoLAr→CheLA :BuenosAires:flagAR:

Education, Social Work & Sysadmin

SoLAr (Software Libre Argentina), is an NGO helping the adoption of FLOSS in Argentina, They helped me get through 2 missions:

- CheLA is an NGO in Buenos Aires, experimenting with arts and technology, and using both to unite Parque Patricios inhabitants. I was sent there by SoLAr to help them with their IT issues, migrate their systems to GNU/Linux and Develop tools that their artistic experiments required (C, Perl, Python).

- **Casa Vela** is an NGO dependent of the Alfonso Farias institution that helps AIDS infected/affected kids providing educational assistance, and giving them access to various workshops.
 - I gave a Computer Science & IT workshop to 6-16 year olds.
 - I also was in charge of Installing and Administrating the Computer Lab. The network design had to cope with the scarce resources and unpredictable network topology/stability.
 - I developed a set of tools based on Avahi to auto-configure and start using services while they appeared on the network (C, Python).

Hobbies

FLOSS

Icecast, Canaima, FFMPEG, SparkleShare, and more

<https://github.com/xaiki/>

Debian

<http://qa.debian.org/developer.php?login=xaiki@debian.org>

Volunteer :flagAR:flagAU:flagFR:

I have volunteered in many organizations:

Travels

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- Backpacked 30+ countries in Europe, Americas and Asia
- Active Member of HospitalityClub, CouchSurfing and BeWelcome Travellers associations.

Arts/Other

- Guitar Player for more than 10 years, Photography, Structural study of human languages.
- Used to run a small set of Linux servers for personal purposes (Mail/Web/...)

Conferences

Speaker

Jan 2008 Linux.Conf.Au (MiniConf) :Melbourne:flagAU:

Why don't the Big Guys Like Debian, Debian in Big Corporations

Sep 2006 CriSol :LaPlata:flagAR:

Report on Education with FLOSS, the CasaVela case

May 2005 Encuentro Mayo '05 :SantiagoDeChile:flagCL:

Debian, A Social Success

Booth & Helper

Aug 2008 DebConf 8 :MarDelPlata:flagAR:

- Helped the local team.

2001-2006 Solutions GNU/Linux :Paris:flagFR:

- Debian Project Booth.

Attendee

2004-2007 FOSDEM :Bruxelles:flagBE:

Free and OpenSource Software Developers European Meeting.

2005 LGM0 :Lyon:flagFR:

Libre Graphics Meeting.

2006-2007 Math Club Sessions :Paris:flagFR:

References

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