Leonardo Sandoval Gonzalez

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${\tt EDUCATION} \ \, \diamond \ \, \textbf{Instituto Nacional de Astrofísica, \'Optica y Electr\'onica}$

MS in Computer Science. Thesis defended in January 2005.

- University of Guadalajara
 Diploma in Computer Science, August 1998.
- ♦ Scholarships
 - · Mexican-French Scientific Agreement (ANUIES-ECOS). January December 2003.
 - · Mexican Science Sponsor (CONACYT). January 2001 December 2002.

EXPERIENCE

May 2020 - August 2023

- · Senior Software Engineer CodeLinaro (Apr 23 Aug 23)

 Part of the core Codelinaro team, lead the Git and CI/CD Repository migration from Linaro Git / Linaro Jenkins to CodeLinaro Git, providing migration tools, documentation and support to internal Linaro teams.
- · Senior Software Engineer Qualcomm (Jan 22 Apr 23)

 Part of the Qualcomm Landing Team CI team, lead the CI/CD Migration from Linaro Qualcomm Jenkins into CodeLinaro CI, the latter becoming the official CI/CD environment. The Qualcomm Landing team members are top contributors on the Linux project, where the CI/CD plays a key role on testing patches before becoming public.
- · Senior Software Engineer MbedTLS (Oct 21 Jan 22) Lead the CI migration from ARM internal Jenkins instance into a public Mbed TLS.
- · Senior Software Engineer Trusted Firmware-A (May 20 Oct 21) Lead the CI migration of the TF-A project from an ARM internal Jenkins instance into a public instance TF-A CI. Work found at patch review page.
- \diamond Intel Corporation

February 2015 - May 2020

- · Integration Architect Intel Stacks (Oct 18 May 20)
 Member of the Software Stacks team, providing specialized and optimized ClearLinux Software Reference Stacks. Lead two stacks as integration architect: Data Analytic and Media, from design to release.
- · Performance Software Engineer ClearLinux (Dec 2017 Oct 2018)

 Member of the ClearLinux Performance Team. Activities included: Performance Package performance Monitoring and Low-level Routine Optimization. For the latter, contributions focused on the GNU C library, adopting the AVX2 technology for strcmp and strcpy string routines.

· Senior Embedded Software Engineer - Yocto Project (February 2015 – December 2017)

Member of the Core Yocto Project Team, providing support for several sub-projects: bitbake, OpenEmbedded-Core and Poky. Initial maintainer of Patchtest, a framework and test suite for OpenEmbedded Core Patches.

⋄ Freescale Semiconductor

July 2012 – February 2015

- Embedded Software Engineer Professional Services (Apr 14 Feb 15)

 Board Support Package (BSP) development and support for i.MX Multimedia Processors. Direct support to US customers for the entire Software Stack: from bootloader up to the user-space, full Linux stack.
- Embedded Software Engineer Field Application Engineer (Jul 12 Apr 14) Customer support for customers located in the USA Central Region and México using i.MX Multimedia Processors, with main focus on issues raised from meta-fsl-arm BSP meta-layer. Key member of the Linux build system migration, supporting community users to transition from *ltib* to the Yocto Project.

♦ Dextra Technologies- Texas Instruments

August 2006 – June 2011

- Embedded Software Engineer GStreamer (August 2007 June 2011). Camera and Video Encoder GStreamer plugin maintainer for the OMAP family processors. Plugins based on TI OpenMAX IL multimedia middle-ware layer.
- Embedded Software Engineer OpenMAX (August 2006 August 2007) Software developer for the OpenMAX IL Camera component for OMAP2 family processors.

ACADEMIC EXPERIENCE

♦ Tecnológico de Monterrey campus Guadalajara

August 2014 – November 2014

Embedded Linux Course (August 2014 – November 2014).
 A Embedded Linux Course course imparted on the Department of Master of Electronic, covering all SW stack on a embedded Linux device

RESEARCH EXPERIENCE

♦ Tecnológico de Monterrey campus Monterrey

August 2007 – January 2011

· Web programmer - Computer Science Department (Part time, August 2009 - January 2011).

Design and implementation of an Second factor authentication system using browser User Agent. A functional prototype built and delivered to customer.

· Web programmer - Computer Science Department (Full time, August 2007 – July 2008).

Design and implementation of a classification method for detecting intruders using keystrokes typing rhythm. The designed algorithm documented and delivered successfully to customer (Google).

♦ Instituto Nacional de Astrofísica, Óptica y Electrónica

August 2000 - December 2004

· Master thesis in Computer Astrophysics (January 2001 – December 2004). Comparison between Decay Times of Satellite Galaxies using N-body numerical simulations and a two-body motion equation with dynamical friction. Several galaxy density profiles were compared. Thesis partially done in Marseille, France Advisors: Ivanio Puerari (INAOE, México) and Lia Athanassoula (Observatoire de Marseille, France).

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· Scientific Programmer - Machine Learning (August - December 2000). Comparison between two classification methods (k-nn and neural networks) using stellar

Advisor: Olac Fuentes (INAOE, México).

Talks

♦ Simulation of Decay Times of Satellite Galaxies using Semi-Analytical methods.

Proceedings of The National Convention of Astronomy 2003.

Instituto de Astronomía, UNAM.

Authors: Leonardo Sandoval, Lia Athanassoula and Jorge Villa

Skills

- ♦ Open Source development under the Linux ecosystem
- ♦ Programming languages: Python, Bash, C, X86-64/ARCH64 assembler
- ⋄ CI/CD: Jenkins, Gitlab, Github
- ♦ Linux Building Systems: bitbake (YP), buildroot
- ♦ Linux Command Line Tools

- Languages \diamond Native Spanish
 - ♦ Fluent spoken/written English
 - ♦ Fair German. ZDaF (Zertifikat Deutsch als Fremdsprache) obtained in Goethe-Institut, Guadalajara, Jalisco, Mexico (1996-1998)

Hobbies

- Hiking, traveling, cooking, swimming, running, functional, amateur chess player
- ♦ Reading: Technology books (array languages, system performance, low-leve vectorization, parallel programming)
- ♦ Meditation: Mindfulness

Reference Available on request.