# Ricardo RIBALDA DELGADO, PhD.

## Personal Data

PLACE OF BIRTH: Zaragoza, Spain | 30 November 1983

ADDRESS: Ryparken 67, 2 th. 2100 Copenhagen Ø, Denmark

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# **WORK EXPERIENCE**

# Now

# Lead Firmware Engineer QTECHNOLOGY A/S, Denmark

## JUNE 2008 | Smart Cameras and Embedded Systems

Development of a state-of-the-art modular industrial camera with outstanding features such as on-line perspective correction or heterogeneous real-time processing. These cameras are used in thousands of installations around the word for both industrial and research applications. Lead the Open Source strategy of the company, with hundreds of contributions to the Linux Kernel, Coreboot, Yocto Project, Gstreamer and OpenCV among others. Organize activities to improve the awareness of the brand: conference presentations, keynotes, demos and trade fares

OCTOBER 2010 SEPTEMBER 2005

# Researcher HCTLAB Unversidad Autónoma de Madrid, Spain Industrial Computing, Biometry and Robotics

Development of industrial computing systems such as: 3D fingerprint sensors for 1 and 10 fingers (for TBS, Switzerland), Access control with smartcards (for UAM), Road Monitoring (for FCC), Qualifications notifications (for UAM), and Automatic Sales of Bus Tickets (deBlas).

**SUMMER 2009** 

# Visitor Researcher Forschungszentrum Jülich, Germany

Scientific Computing and Profile-guided optimization

Optimization of the Low Level processing stages of the GLORIA high altitude spectrometer. My contributions resulted in a total speedup of more than 200x, allowing the processing of the spectrometer's data in real time.

#### EDUCATION

NOVEMBER 2015 PhD

PhD in Computer Engineering and Telecommunications

Universidad Autónoma, Madrid, Spain

Dissertation: "An Innovative Vision System for Industrial Applications"

Supervisor: Prof. Javier Garrido Salas Grade: Doctor Europaeus Cum Laude

**JUNE 2007** 

Master of Advanced Studies in Computer Engineering

AND TELECOMMUNICATIONS

Universidad Autónoma, Madrid, Spain

Dissertation: "Intelligent and reconfigurable architecture for remote

image processing applications based on an FPGA with Linux"

Supervisor: Prof. Javier Garrido Salas Grade: Sobresaliente (10/10)

**JUNE 2005** 

Master in Computer Engineering

**Universidad Autónoma**, Madrid, Spain Internship: University Research Lab

GRADE: Notable (8/10)

#### LANGUAGES

SPANISH: Mother Tongue

ENGLISH: Excellent (Spoken English at Work - C2)

DANISH: Medium Knowledge (PD2)

## OTHER EDUCATION

2014 High Level synthesis for FPGAs with Vivado HLS

2012 OpenCL Training

2010 Intensive VHDL and Xilinx Tools

2009 Image Processing with FPGAs

2003 Linux SysAdmin

## **CONGRESS ATTENDANCE**

 2017 - 2019
 Kernel Recipes

 2014, 2019
 Linux Plumbers

 2013, 2017
 Kernel Summit

 2011 - 2018
 LinuxCon Europe

2010 - 2018 Embedded Linux Conference Europe 2007 - 2018 Chaos Communication Conference

# **OPEN SOURCE CONTRIBUTIONS**

- Linux Kernel: ~252 contributions merged, including a 9+ year old bug in the driver core.
- Yocto project / Open Embedded: 116 contributions. "Supporting Organization".
- U-boot: 47 contributions merged. Maintainer of Xilinx PowerPC boards.
- libv4l2/v4l-utils: 17 contributions.
- flashrom: First support for EEPROM memories.
- *Gstreamer instruments:* 12 contributions.
- Coreboot: 6 contributions.
- · Debian: Maintainer of 2 packages.
- OpenJDK: 1 contribution.

## SPEAKER AND TRAINER

- 2018: Speaker: "Can small companies upstream? The story of and Industrial Camera manufacturer.", Embedded Recipes 2018.
- 2018: Keynote Speaker: "Industrial Computer Vision" (invited by AMD's CTO Mark Papermaster)", *Embedded World 2018*.
- 2016: Keynote Speaker: "The Small Potato Collider (or how to solve a multidisciplinary problem using a modular camera)", NOBUGS2016.
- 2016: Speaker: "Developing an Industrial Machine Vision Application using Mentor Embedded Linux on AMD R-series SOC with Qtechnology Cameras", *Mentor Webinars*.
- 2015: Speaker: "The art of counting potatoes with Linux", *Embedded Linux Conference Europe*.
- 2005, 2006, 2007, 2008, University Teacher: Structure and Technology of Computers II (X86 Assembly), *Universidad Autónoma de Madrid*.

- 2007, 2008, 2009 & 2010, Trainer: Embedded Linux, Electra Training.
- 2007 & 2008: Teacher: Basic Robotics, UAM
- 2007: Speaker: OpenSource Development in the UAM, AEI
- 2006: Speaker: Cryptography in Linux UAM Summer Courses
- 2004: Speaker: Linux Introduction Campus Party
- 2002, 2003: Panel Moderator: "OpenSource in the Public Administration" *Hispalinux Congress*

## **OTHER ACHIEVEMENTS**

- 2019 Father of Ricardo Thor
- 2016 Father of Violeta
- 2015 Eudyptula Challenge
- 2012 Winner of the Copenhagen Startup Weekend

## **GPG** KEY

9EC3 BB66 E2FC 129A 6F90 B395 56A0 D81F 9F78 2DA9