# Ricardo RIBALDA DELGADO, PhD.

#### Personal Data

PLACE OF BIRTH: Zaragoza, Spain | 30 November 1983

ADDRESS: Ørnevej 26, st th, 2400 Copenhagen, Denmark

PHONE: +45 51958884

EMAIL: ricardo@ribalda.com

WEB: ribalda.com

# **WORK EXPERIENCE**

Now June 2008 Lead Firmware Engineer QTECHNOLOGY A/S., Denmark

Smart Cameras and Embedded Systems

Development of the firmware, kernel and low level user libraries for high performance Smart Cameras for the food industry. These cameras have been deployed in hundreds of locations around the world, and work at framerates up to 1000 fps. During this 5 years trip we have launched 5 products and bring up over 50 PCBs. This work has lead to contributions in the Linux Kernel, Das U-boot, Yocto Project (Open Embedded), flashrom

and Gstreamer, among others

OCTOBER 2010 SEPTEMBER 2005 Researcher HCTLAB Unversidad Autónoma de Madrid, Spain

Industrial Computing, Biometry and Robotics

Development of state of the art industrial computing systems like: 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 Low Level processing stages of the GLORIA high altitude spectrometer. My contributions lead to a process speedup of more than 200x, allowing the processing

of the spectrometer's data in real time.

#### EDUCATION

November 2015

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)

# 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

# LANGUAGES

SPANISH: Mother Tongue

ENGLISH: Excellent (Sponen English at Work - C2)

# **CONGRESS ATTENDANCE**

2014 Linux Plumbers

2013 Kernel Summit

2011-2015 LinuxCon Europe

2010-2015 Embedded Linux Conference Europe

2007-2015 Chaos Communication Conference

## **OPEN SOURCE CONTRIBUTIONS**

- Linux Kernel: ~200 contributions merged, including a 9+ year old bug in the driver core.
- *U-boot:* 47 contributions merged. Maintainer of Xilinx PowerPC boards.
- Yocto project: 19 contributions. "Supporting Organization".
- libv4l2/v4l-utils: 8 contributions.
- flashrom: First support for EEPROM memories.
- Gstreamer instruments: 4 contributions.
- clpeak: 2 contributions.
- vlc: 1 contributions.

# SPEAKER AND TRAINER

- 2015: Speaker: "The art of counting potatoes with Linux", Embedded Linux Europe.
- 2005, 2006, 2007, 2008, Trainer: Structure and Technology of Computers II (Assembly), Universidad Autónoma de Madrid.
- 2007, 2008, 2009 y 2010, Trainer: Embedded Linux, Electra Training.
- 2007 y 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: Round Table Moderator: "OpenSource in the Public Administration" Hispalinux Congress

# **OTHER ACHIEVEMENTS**

- 2015 Eudyptula Challenge
- 2012 Winner of the Copenhagen Startup Weekend