Lorenzo Chelini

"In the end, we are our choices. Build yourself a great story."— Jeff Bezos

Personal Data

Birth: Lucca, Italy | 23 December 1993
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Education

07/2016-07/2017 | MSc studies in Computer Engineering, Embedded System Track
Chalmers University of Technology, Göteborg
Exchange program with focus on dependable computing with emphasis on system-level design of fault-tolerant systems, EDA-based design and verification methods, micro-system system packaging and modern micro- and nano-scale processing.
MSc Thesis: "Power Estimation for DSP Components for Fiber-Optic Communication Systems"
Advisor: Prof. Per Larsson-Edefors

Summer 2016 | Summer school at European Innovation Academy, Turin
"From an Idea to a Tech Start-Up in 15 days"
The European Innovation Academy (EIA) is a non-profit educational institution recognized for excellence in tech entrepreneurship education. EIA educational programs are jointly developed with professionals of world class partner universities and companies: UC Berkeley, Stanford University, Google, Amadeus, IBM and Ferrero.

10/2015-07/2017 | MSc studies in Computer Engineering, Embedded System Track
Polytechnic of Turin, Turin
Emphasis on: Computer Architecture, Real-time OS, Digital and Analog electronics, RTL and Logic level design for ASICs and FPGA, EDA and CAD-based synthesis and optimization of digital systems.
Grade: 110/110

09/2012-09/2015 | BSc in Computer Engineering
University of Pisa, Pisa
BSc Thesis: "RAPID Robotic Arm empowering People wIth Disabilities Project"
Advisor: Prof. Enrico Fanucci
Grade: 101/110

Work Experience

2014-2016 | Junior ICT Officer
Via Roma Agency s.r.l, Lucca
Implementation and management of the software applications and hardware infrastructure that support operations of the SME.

Public Projects

2016 | **DLX**
Implementation of a five stages DLX pipeline processor. In this project I have refined the DLX processor from the RT level down to the physical layout. The project consists of four modules connected together according to the structural approach: a complex data path, an hardwired control unit, a data memory and an instruction memory. The code is written in VHDL.

2015 | **Self-Test Module**
Design and simulation of a System-On-Chip including a Control Unit, Data Memory and a Xilinx IP peripheral. The code is written in VHDL.

2015 | **Proximity Alert System**
System realized using HC-SR04 Ultrasonic Ranging Module, FRDM-K64F board and Micrium uC/OS. The code is written in C.

2015 | **RAPID**
Robotic Arm Empowering people with Disabilities. The project has been presented at the ARTEMIS 2015 call brokerage event. The project consists of a robotic arm running a real-time software that is able to track objects selected by the user. The software is based on Intel Computer vision library OpenCV 3.0 and is written in C/C++.

2014 | **Force4**
Well known game implemented using a p2p and client server architecture. Peer-to-peer relation established following client-server handshaking session. The code is written in C.

List of publications

2017 | **MSc Thesis: Power Estimation for DSP Components for Fiber-Optic Communication Systems**
The thesis proposes and examines a power estimation method for Finite Impulse Response (FIR) filters used in short-reach fiber-optic communication systems, where limitations on size and power consumption start to become a critical design metric.

Languages

Italian:Mothertongue
English:Fluent
Swedish:Basic Knowledge

Interests and Activities

I like spending time with friends and family. I love cooking and tasting new food. I try to travel as often as possible. I am an expert rower and active member of the local rowing club.

References

References available upon request.