Ignasi Ballarà Franco

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WORK EXPERIENCE

- **Vicens Vives Digital**, Barcelona, Spain   01/2017—06/2018
  Software Engineer

  - Implemented several RESTful APIs in Java, PHP and Kotlin using DDD and Hexagonal Architecture.
  - Decreased APIs response time by caching data on Redis, leading to a significant increase in performance.
  - Increased security of all microservices by implementing OAuth 2.0 protocol for authorization.
  - Reduced deploying-to-production frequency from once a month to every week by building a Continuous Delivery system based on Jenkins and Nexus Repository Manager.
  - Built a network using several ESP8266 microcontrollers for Jenkins and Tomcat monitoring using C and Python.
  - Introduced machine learning to the team in order to have a more user-personalized experience.

- **Opentrends**, Barcelona, Spain   06/2016 — 01/2017
  DevOps & Software Engineer

  - Maintenance of an integrated solution that offers a Cloud Computing infrastructure for a CaixaBank Project.
  - Design and development of a Continuous Delivery environment with Docker, integrating SonarQube, Jenkins, Subversion, Nexus Repository Manager and MySQL.
  - Development in Java and JavaScript.

- **Polytechnic University of Catalonia**, Barcelona, Spain   05/2015 — 02/2016
  Research Intern, Bioengineering Lab

  - Built a very user-friendly Android app for health monitoring among elderly people.
  - Implemented an algorithm for heart rate monitoring in MATLAB.

PROJECTS

- **SeniorFit**
  This project's goal was to create a very user-friendly android application for smartphones aimed for elderly people to keep track of their mental, alimentary, activity and heart health. My responsibilities were to design and implement this application

- **CardioSmart**
  Created from scratch a completely integrated system to monitor several parameters of importance from heart rate (such as RTT) with reliable accuracy for medical purposes. Some of my tasks were to coordinate and work in the hardware subgroup, designing and implementing the electronics for detecting the user's heartbeat.

EDUCATION

- **Polytechnic University of Catalonia**, Barcelona, Spain   09/2010 — 01/2016
  B.Sc. in Telecommunications Engineering

  Degree (B.Sc.) focused on both electronics and software engineering. Course scope included antennas and microwaves theory, analog and digital signal processing techniques, statistics and stochastic processes, communication systems design, networks and computer science. Final Project due on January 2019.

- **Ramon Llull University, La Salle**, Barcelona, Spain   09/2016 — Present
  M.Sc. in Telecommunications Engineering

- **Online Education (Coursera)**   2013 — Present
  > Digital Signal Processing (EPFL, Lausanne)
  > Algorithmic Toolbox (University of California, San Diego)
  > Data Structures (University of California, San Diego)
  > Neural Networks and Deep Learning (Stanford University)
  > Improving Deep Neural Networks (Stanford University)
  > Structuring Machine Learning Projects (Stanford University)

CERTIFICATIONS

- > Oracle Certified Associate (OCA), Java SE 8 Programmer (Oracle)
- > Certificate in Advanced English (University of Cambridge), 2012

LANGUAGES

- English: Professional working proficiency (Cambridge CAE level)

- Spanish & Catalan: Native