

Rafael Ferrín

Curriculum Vitae

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Iwate, Japan

Summary

Outstanding on geometric analysis, mechanical designs and creative solutions.

Creative person, motivated by challenges.

My goal is to work on challenging projects where my skills make the difference.

Experience

December 2017	April 2020	Researcher at Iwate University (2 patents)
October 2014	September 2016	Vice President of Engineering at 16Lab Inc. (5 patents)
January 2013	February 2014	Design Engineer at FACC
January 2011	January 2013	R&D Engineer at GRVC (1 Patent)
July 2008	January 2011	Internship at GRVC
March 2007	March 2008	Cultural Coordinator at Universidad de Sevilla
September 2006	February 2007	Internship at Automation Department
August 2003	September 2003	Representative in Korea

Mechanical research at Iwate University.

- Development of a forestry robot for felling trees, including hydraulic prototypes, light weight prototypes, mini-chainsaw prototypes, etc.
- Research about current technologies, power requirements and power sources, etc.
- Development of my own robotic designs for snake arms and robotics joints (**2 patents in process**).

Vice President of Engineering at 16Lab Inc.

- Development of methods and procedures for interaction with wearable devices. (**3 patents**).
- General and proprietary algorithms for orientation, gesture recognition and activity tracking.
- Proprietary algorithms for cooperating/coordinating with other devices. (**2 patents**).
- Advice and support related to mechanical design, including stress analysis and conceptual designs.
- We won several prizes, including CEATEC 2015 Innovation Awards, Home Entertainment category.

Design Engineer at FACC

- Problem-solving oriented **design of furniture** (mechanisms), focused on conceptual design.
- **More than 9 designs** considered novelty inventions (hinges, overhead bins turning systems, etc.).
- Advice and conceptual contributions solving a variety of mechanical design issues.
- General advisor about sensors, motors, power consumption, usability, human factors, etc.

GRVC (Robotic, Vision and Control Group)

- Main researcher for the ROBOCA project for **IBERDROLA**: **design of an inspection robot** to inspect possible cracks or leaks in a power plant (dark-wet-hot-small places in a corrosive atmosphere).
- Design and construction of the prototype for this robot (Mechanics, optics, computer vision...).
- Results deemed better than expected by the company; they decided to commercialise our product.
- INSROCA project: further development of the prototype for commercial use. (**1st patent**).

Education

2005 2011 [Master of Automatic and Electronic Systems Engineering.](#)
2001 2005 Bachelor of Industrial Engineering

Some subjects covered:

- Optimization and Optimal Control
- Laboratory of Computer Science and Robotics
- Integrated Production Systems
- Manufacturing Technology
- Industrial Automation and Robotics
- Robotics and Perception Laboratory
- Robot Control and Programming

My thesis: **“Analysis and design of a vision system for inspection robots”** obtained the highest qualification (**Outstanding, A**).

Skills

- Engineering skills
 - CATIA, QCAD
 - Matlab, Java...
 - Robotics
 - Analysis and optimisation
 - Geometry maths & physics
 - Wearables technologies
 - Computer Vision
- Languages skills
 - Spanish (Native)
 - English (Business level)
 - Japanese (beginner)
- Soft skills
 - Common sense
 - Proactive
 - [Thinking outside the box](#)
 - [Lateral thinking](#)
 - Synergies seeker
 - Working under pressure
 - Business ethics
 - Team work
 - Communicative aptitude
 - Leadership
 - Multiculturalism

Interests and Achievements

- [ESTIEM](#)
 - Founder of Seville Local Group
 - Local responsible (1 year)
 - Event organiser (>5 events)
 - Working group leader (5 times)
 - Tutor of Barcelona Local Group
 - ARWA project responsible
 - Language Programme starter
- Other associations
 - Founder of ESIbot (Robotics)
 - Founder of TIR (IT workshop)
 - Member of IEEEsb
- Sevilla Intercambio
 - Founder and organiser for 3 years
 - Biggest Language meeting in Seville during those years
- Theatre and Musical theatre
 - Actor (14 years, >20 projects)
 - Scenographer (>10 projects)
 - Managing Director (>10 projects)
- Student Delegate at the university
- Food and Cultures
- Furniture design

References

www.ferrin.org
[LinkedIn Profile](#)