DAVID VILELA

PHD INDUSTRIAL ENGINEER

I'm an industrial engineer specialized in civil engineering with seven years of research experience in the mechanical engineering branch, more precisely in implementation of multibody simulators applied to virtual reality, vehicle simulation, mechanisms and machinery. I've worked on the development of real-time vehicle models for hardware-in-the-loop platforms and my PhD thesis was focused on contact models and collision detection for virtual assembly, including a stay at the Computer Graphics and Virtual Reality Group from the University of Bremen, specialized on computer graphics, artificial vision, virtual reality and natural user interfaces. I've also developed hardware and control software for haptic interfaces and I've teached Computer Assisted Design at the University of A Coruña.

I am particularly interested in new technologies: machine learning an AI, blockchain and decentralized systems, robotics, autonomous vehicles, networks and communications, simulations, videogames and virtual and augmented reality.

I am a great enthusiast of science and divulgation, the aerospatial industry, physics and mathematics, music, design, LEGO blocks and I'm fascinated by the human brain and how things work, as well as explaining and teaching them.

CONTACT

(+34) 650 230 560

dvilelaf@gmail.com

www.dvilela.info

EXPERIENCE

2014 - 2018	**Mechanical Engineering Laboratory, UDC** FPI Predoctoral Researcher and PhD Teaching Assistant
2017	**Computer Graphics Group, University of Bremen** PhD student on international stay
2012 - 2014	**Mechanical Engineering Laboratory, UDC** Research assistant
2011	**Department for Urban Planning, Town Hall, Cedeira** Internship student
2007	**Civil Protection, Cedeira** Stage assembly, light and sound installations and security staff

EDUCATION

2014 - 2018	**PhD in Industrial Engineering** *University of A Coruña*
2012 - 2013	**Industrial Engineering Research Master's Degree** *University of A Coruña*
2003 - 2011	**Industrial Engineering Master's Degree** *University of A Coruña*

COURSES AND ACTIVITIES

2014	**C1 Certificate in Advanced English** *Cambridge School*	
2013	**Introduction to Python** *University of A Coruña*	20 hours
2011	**Introduction to Artificial Intelligence** *Stanford University*	8 weeks (online)
	Introduction to Machine Learning *Stanford University*	8 weeks (online)
	Child Education and Support Volunteering *Nepal Sonríe NGO*	3 weeks
2008	**Welding** *Navantia Ferrol*	20 hours
2004	**C programming**	50 hours
2003	**Coastal Skipper** *Nautical and Fishing School, Ferrol*	
2002	**Basic and Intermediate English** *Official School of Languages, Cedeira*	4 years
2001	**AutoCad**	30 hours

SKILLS

Development	C++, C, Python, Fortran, Matlab/Octave, Labview, HTML/CSS, GNU/Linux
Design and edition	Solid Edge, Solid Works, Blender, AutoCad, Inkscape, Gimp
Languages	English, Spanish, Galician
Artistic	Guitar
Other	Driving license