Federico Martin Roasio | Resume

Argentine and Italian Citizenship (EU Passport)
Uspallata 662 4A (C1143ACF), Buenos Aires, Argentina
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Education

2007–2013 **Electronic Engineer (MSc equivalent)**, *School of Engineering, University of Buenos Aires*, Argentina, *GPA Equivalent − 3.92*
Elegible for Gold Medal and Honorary Diploma (Top 1%)

Thesis

Title   *Integrated Navigation Systems applied to Unmaned Aerial Vehicles*

Supervisor   PhD. Juan Ignacio Giribet

Description   The thesis was focused on the design, simulation, implementation and validation of a GPS/INS integrated navigation system applied to unmanned aerial vehicles.

Experience

2018–Present **Technical Project Lead**, MercadoLibre (nasdaq:meli)
Leading core backend on Account team at MercadoPago. Over $17 billion payment transactions in 2018 for more than 120 million users.

Duties:
- Microservices architecture design and implementation using message queues, key-value stores, relational databases and document search engines.
- Follow up of quaterly objetives, new hirings onboarding process, 1:1 feedbacks, salary reviews and promotions proposals.
- Technical and cultural interviews.
- Organization of tech workshops for the community.
- On-call rotation strategy definition and execution.

2014–Present **Head of Teaching Assistant**, School of Engineering, University of Buenos Aires
Head of Teaching Assistant in Algorithms and Programming I, first course on algorithms and programming for Electrical Engineering students.

Duties:
- Resolution of exercises on algorithms, programming in C language and good software design practices. Syllabus: C programming basics, Bitwise Operators, Structures, Dynamic Memory, Files, Recursion, Divide and Conquer, Sorting, Searching, Abstract Data Types, Lists, OOP introduction.

2015–2018 **Head of Engineering & Infrastructure**, Sumaprop

Sumaprop is the #1 Real Estate SaaS CRM in Argentina, currently expanding to Latin America. Acquired by Navent Group in 2019.

Duties:
- Technical leadership and project management using Agile Methodologies. Scrum and Kanban.
- Weekly meeting with CEO and founders to review product development strategy, hiring plan and company culture program.
- Fullstack web applications development. PHP, Laravel, AngularJS and jQuery, MySQL.
- Cloud infrastructure set up and maintenance. Cloud Servers, Load Balancers, DNS and CDN services.

2012–2015 **Guidance, Navigation and Control Researcher and Developer**, Signal Processing, System Identification and Automatic Control Theory Lab (GPSIC), University of Buenos Aires

GN&C researcher and developer for CoNAE's VEx series of suborbital rockets, under a collaboration agreement between CoNAE (Argentine Space Agency) and GPSIC-FIUBA.

Duties:
- Development of integrated navigation systems for suborbital rockets in C/C++. Real time data fusion with Kalman filters using multiple sensors, including accelerometers, gyroscopes, magnetometers and GPS.
- Development of a distributed system to collect data from more than 15 sensors in real time using concurrent programming in C under a Linux platform.

2014–2015 **Automation Engineer**, Tenaris

Automation Engineer focused in design and development of new robotic cells to automate steel pipes manufacturing industry.

Duties:
- Analysis of industrial processes and its posible enhacements by means of robotics cells.
- Design, simulation and development of robotic cells projects.
- Intensive training as a member of the Global Trainee Program of the company.

2013–2014 **Software Engineer**, Oneloop Digital Agency

Oneloop is a fast growing SaaS company focused on real-estate web apps.

Duties:
- Backend and Frontend Web developer using PHP, javascript, jQuery, MySQL.

2011–2013 **Teaching assistant, research assistant and developer**, Embedded Systems Lab, University of Buenos Aires

Teaching assistant, research assistant and microcontroller applications developer.

Duties:
- Firmware Validation of unreleased products for NXP Semiconductors USA.
- Teaching assistant at Introduction to Embedded Systems, Introduction to Real Time Operative Systems, Communication Protocols for Embedded Systems and Introduction to C Programming Language.

Language

Spanish	**Mother Tongue**	
English	**Advanced**	*First Certificate in English – Grade A*

Tools & Technologies

C/C++, Golang, PHP, Javascript, Java, MySQL, Oracle, Cassandra, Firebase, Rackspace, AWS, Git, Agile Methodologies, New Relic, Datadog, Jira, Opsgenie, HTML5, CSS3, Matlab/Octave, LaTeX, Embedded Systems.

Scholarships and Awards

2014 Best graduate of all Engineering Careers from the University of Buenos Aires, National Academy of Engineering, Argentina

2013 2nd prize to the best graduate thesis in Engineering, "Premio Pre Ingeniería 2013", Argentine Center of Engineers

2012-2013 Scholarship awarded by the National Agency for Promotion of Science and Technology (Becas TICs, ANPCyT).

2012 Schorlarship awarded by Texas Instruments Inc. to assist to Tech Day São Paulo 2012.

2012 Certificate of Recognition from NXP Semiconductors USA, Microcontroller Business Lines.

2001-2006 Argentine representative of international mathematical tournaments, like the International Mathematical Tournament of the Towns, the Asian Pacific Mathematics Olympiad and Olimpíada de Mayo. Preselected as representative of the Iberoamerican Mathematical Olympiad and the International Mathematical Olympiad. National and Regional Distinctions in the Argentine Mathematical Olympiads.

Publications

2014 Navigation, Guidance and Control Computer Design: An application to Unmanned Aerial Vehicles. JAR 2014 (Argentina).

2012 Graphical User Interface Library for low cost embedded systems. ETC2012 (Costa Rica).

2012 Design and Implementation of an unmanned Quadcopter, CASE 2012.

2012 Graphical User Interfaces for Embedded Systems with Real Time Operative Systems, CASE 2012.

2011 Graphical User Interface for LPC17XX, Application Note for NXP Semiconductors USA.