

Education

- 2018-2020 **Master of Science in Mathematics**, Sorbonne University, Paris (one semester exchange at University of Montreal).
- 2018 **Bachelor of Science in Mathematics, with honors**, Sorbonne University, Paris, France.
- 2007 **Embedded Systems Engineer**, Ecole des Mines de Saint-Etienne, Saint-Etienne, France.

Experience

- Jun 2018 – Present **Math Tutor**, Paris, France.
Undergraduate Linear Algebra and Calculus tutor.
- Sep 2017 – Mar 2018 **Part-time Lecturer**, Paris-Sud University, Orsay, France.
C++ and Object Oriented development lecturer.
- May 2015 – Sep 2016 **CTO/Cofounder**, Flystro, Montreal, Canada.
Building a marketplace for drone services : Conception and development of the web platform, ensuring availability, scalability and delivery of aerial footage through the platform.
- Jun 2015 – Dec 2015 **Software Engineer**, Tata Communications, Montreal, Canada.
Building multi-protocol SMS delivery hub in a multithreaded environment.
- May 2013 – Avr 2015 **Devops/Automation Engineer**, Atomic, Montreal, Canada.
Industrialization of a job scheduler, automating over 100000 task per day.
- Jan 2013 – Apr 2013 **Software Engineer**, Cofely Ineo, Velizy, France.
Design and development of an audio matrix, mixing radio and voice over IP feeds, providing high availability communication between air traffic controllers and pilots.
- Mar 2012 – Dec 2012 **Software Engineer**, Thales Land & Air Systems, Elancourt, France.
Interconnection between cons-measures system and inertial system : Transmission of navigation data following RS232 standard in hard real-time environment.
- Sep 2007 – Mar 2012 **Software Engineer**, Amadeus, Sophia Antipolis, France.
Design of distributed systems based on middleware solutions.

Scholarships and awards

- 2005 Award of Merit from the French Government to continue my studies at one of France's elite engineering schools, "Ecole Nationale Supérieure des Mines de Saint Etienne". This scholarship is awarded based on ranking in a highly selective entrance examination.
- 2015 80k US dollar equity free investment from the Chilean Government to join Start-Up Chile accelerator in Santiago.

Skills

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|-----------------|--|------------|---|
| Algebra : | Commutative Algebra, Galois Theory, Group Representations, Homological Algebra | Geometry : | Algebraic Geometry, Differential Geometry, Lie Groups and Algebras, De Rham cohomology, Čech cohomology, Descent Theory, D-modules, Triangulated and Derived Categories, Resolution of singularities in characteristic 0. |
| Number Theory : | Modular Arithmetic, Elliptic curves, Modular Forms | Analysis : | Sobolev Spaces, spectral theory of compact operators |

Operating Systems : Windows, Unix, Linux, HP, Aix,
TPF-IBM, Vmware, virtualBox

Tools : Scipy, matplotlib, scikit-learn,
Eclipse, Xemacs, LabView, Val-
grind, Gdb

Config Management : CVS, Mercurial, Git

Design : Rational Rose, StarUML, Design
Patterns, ISIS, Ares

Languages : SageMath, C/Embedded C, C++,
Qt, SQL, Latex, PHP, Shell, Perl,
Python, Ruby, AngularJS, UML

Continuous : GitLab, Jenkins, hudson, Maven,
Integration Ant

Languages

English **Fluent**

French **Native speaker**

Arabic **Native speaker**

Advisors for reference letters

Prof. João Pedro P. **Institut de Mathématiques de Jussieu**, *joao-pedro.dos-santos@imj-prg.fr*.
Dos Santos

Prof. Vincent **Institut de Mathématiques de Jussieu**, *vincent.humiliere@imj-prg.fr*.
Humilière

Interests

Lectures/Music Lectures in mathematics and physics, classical music, guitar.