

## Personal Information

Address Inria Paris, 2 Rue Simone Iff, 75012 Paris, France.  
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Languages Spanish (Native), French (Fluent), English (Fluent) and Japanese (Conversational).  
Born on 21/02/1990, Mexican

## Experience

2016-present **Research assistant**, *Institut national de recherche en informatique et en automatique (Inria)*.  
Paris research center, team QUANTIC (Inria, École des mines, École normale supérieure).  
April-June 2018 **Visiting PhD student**, *Institut Henri Poincaré*, Paris, France.  
Trimester "Measurement and control of quantum systems: theory and experiments"  
2012-2014 **Software engineer**, *Nuxiba technologies*, Mexico City.

## Education

2016-present **PhD candidate, Mathematics and control**, *École des Mines de Paris*, France.  
Advisors: Pierre Rouchon, Alain Sarlette (Inria-Paris)  
2014-2016 **MSc, Systems and control**, *CINVESTAV - Instituto Politécnico Nacional*, México City.  
Advisor: Jorge A. León  
2008-2012 **Diploma, Electronic engineering**, *Instituto Tecnológico de Orizaba*, Veracruz, México.

## Publications

2018 Exponential stochastic stabilization of a two-level quantum system via strict Lyapunov control. *With Alain Sarlette and Pierre Rouchon*. Proceedings of 57th IEEE Conference on Decision and Control. *arXiv:1803.07542*

## Conference communications, seminars

2018 'Exponential stochastic stabilization of a two-level quantum system via strict Lyapunov control'. 57th IEEE Conference on Decision and Control, December 19. Miami, FL.  
'Using noise assisted quantum feedback for exponential stabilization of quantum states', International Conference on Quantum Computing, 26-30 November. École Normale Supérieure Paris  
2016 'Control de sistemas cuánticos abiertos', Seminario de Análisis, June 17. Universidad Autónoma Metropolitana - Iztapalapa

## Outreach

2019 'Maîtriser l'étrangeté quantique: Synthèse des contrôleurs quantiques', contest 'Ma thèse en 180 secondes', final of Université Paris Sciences & Lettres. Collège de France.  
2017 Control de sistemas cuánticos abiertos. Chapter in "Modelos en Estadística y Probabilidad IV" (Models in statistics and Probability), Aportaciones Matemáticas, Serie Comunicaciones 51, pp. 109-138, ISBN: 978-607-02-9909-4.

## Grants and Scholarships

2016-2019 Doctoral contract at Mines ParisTech.  
2014-2016 CONACYT Master scholarship.