Juan Carlos **Calvo Jackson**

MATHEMATICIAN · MACHINE LEARNING SCIENTIST · PHYSICIST

✉ juancarlos.calvojackson@gmail.com | 🏠 jccjgit.github.io | jccjgit | 🔗 jc-cj

Education

University of Oxford *Oxford, UK*

PROBATIONER RESEARCH STUDENT *Oct. 2014 - Mar. 2017*

- Carried out original research on String Theory at the Mathematical Institute. Specifically, into geometric transitions of Calabi-Yau manifolds and their low energy theories.

University of Cambridge *Cambridge, UK*

MASTER OF ADVANCED STUDIES (PART III OF THE MATH TRIPOS) *Oct. 2013 - Jul. 2014*

- Sat exams on String Theory, Advanced Quantum Field Theory, Differential Geometry, and Symplectic Topology among others. Also attended lectures in Algebraic Geometry and Complex Geometry.
- Rowing team member at Churchill College.

Universidad Tecnica Federico Santa Maria *Valparaiso, CHILE*

MASTER OF SCIENCE, PHYSICS MENTION *Mar. 2012 - Mar. 2013*

- On my master thesis, my advisor Ivan Schmidt and I, proposed an alternative probe for the Majorana neutrino at the International Linear Collider.

Universidad Tecnica Federico Santa Maria *Valparaiso, CHILE*

BACHELLOR OF SCIENCE, PHYSICS MENTION *Mar. 2008 - Dec. 2011*

- 2nd best graduate from the 2008 promotion.

Experience

jccjgit.github.io *Valparaiso, CHILE*

MACHINE LEARNING SCIENTIST *Nov. 2017 - TODAY*

- Developed and maintain website with personal notes on Statistical Learning.
- Implemented Machine Learning methods on real databases using the Scikit-Learn Python library.
- Developed implementation of statistical estimators not present in existing libraries.

Stealth Start Up based in Vancouver *Valparaiso, CHILE (remote)*

PRIVATE CONSULTANT & QUANTITATIVE MODELLING EXPERT *Sept. 2017*

- Crytocurrency startup in stealth mode required a risk analysis for business model, which was rapidly delivered by the short deadline for presentation to an international development group.
- Feedback: "Incredibly knowledgable and a joy to work with. Thank you Juan Carlos!"

Universidad Tecnica Federico Santa Maria *Valparaiso, CHILE*

QUANTITATIVE SUPPORT *Sept. 2017*

- Extracted evacuation flow of people from a database of calls made by inhabitants of Valparaiso around the time of the tsunami alert of the 16 of September of 2015.
- Implemented filter based on the entropy of users to exclude non-human agents.

Mathematical Institute, University of Oxford *Oxford, UK*

TEACHING ASSISTANT *Jan. 2016 - Mar. 2017*

- C3.7 Elliptic Curves (2 sets).
- B3.2 Geometry of Surfaces (2 sets).
- B2.2 Commutative Algebra (2 sets).

Universidad Tecnica Federico Santa Maria *Valparaiso, CHILE*

TEACHING ASSISTANT *Mar. 2009 - Dec. 2011*

- I worked as a TA on multiple courses which included all the standard Algebra and Calculus courses of the engineering curriculum, plus Electrodynamics, Classical Mechanics, and Quantum Mechanics for physics students.

Skills

Programming Python (Scikit-Learn), Mathematica, MatLab, MySQL
Languages Spanish, English