

Working in the most competitive and notable research institutes in Europe has given me strong team working skills, with a focus on attaining the end goal using innovative techniques and tools. Now I am focusing my attention on applying my data skills in an industrial environment to solve a much wider world of questions.

I am currently working as a senior data scientist within the Large Format Print Big data team at HP Barcelona. The challenging work here allows me to work across the business - predicting performance of printers with HW control, testing manufacturing parameters in the field and deepening our understanding of our customer base.

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## EXPERIENCE

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### Senior Data Scientist

HP Inc, Barcelona  
April 2018 - Current

Working to make our large format printers smarter.

### Data Science Fellow

S2DS with Pivigo, London  
Aug. 2017 – Sept 2017

As intern with SNTV, a world leading sports news video content provider, I was working on a 5 weeks, time boxed, data project to do a detailed customer segmentation and associated assessment of resource allocation.

- Part of a team of 3 which carried out first in-depth data analysis of content broadcast and download data.
- Performed customer segmentation in order to deepen understanding of how SNTV's content is used and identify undervalued and/or ineffective content.
- Provided further understanding of change in market due to rise in digital media and how this affects SNTV clients.
- Building of recommendation system to provide individual recommendations for SNTV clients.

Main Technologies: Python (scikit learn)

Skills: Customer Segmentation. Identifying Market Trends. Statistical Analysis. Clustering. Recommender Systems.

### Travel & Personal Development

May 2016 – Aug 2017

During this period I traveled through latin america learning Spanish and volunteering.

### Research Associate

Leiden University  
May 2014 – May 2016

Participated in the development of 'Big Data' (1 PB) scientific data archive – latest european astronomical all sky survey.

- Took a lead role in beta testing of archive: co-organised a team of 10 scientific testers, gathered amateur astronomer testers, collated all test cases and implemented and tested these in SQL. I then raised issues and liaised with the European Space Agency (ESA) archive development team to identify areas of weakness within the archive access software.
- Worked alongside ESA and private companies to develop archive tools: established companies had access to necessary data, understood archive contents and limitations of data (while limited data sets available).
- Wrote the long term data preservation plan, contributed to testing of data traceability and to the collection and validation of data.
- Designed and supervised multiple student projects, Msc and PhD level taking place over time periods of 3-6 months.
- Produced high impact research contributing to over 15 published works which together are cited over 400 times.

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## EXPERIENCE

### Junior Researcher

ESO, Munich  
DIAS, Dublin  
Oct. 2009 – Nov. 2013

Based between four different research institutes while working towards my PhD in astronomy, I developed effective communication skills, an independent work ethic and good project development skills.

- Performed rigorous testing for biases within data , cleaning methods and analysis.
- Learnt to work as an effective team member locally and remotely.
- Awarded three research grants together worth over € 100,000.

Main Technologies: MIDAS (FORTRAN based). IDL.

Skills: Time Series Analysis. Data Visualisation and Communication. Data Cleaning.

### Junior Researcher

Space Lab, Dundee  
University, Scotland  
Oct. 2008 – Oct. 2009

Implementing and testing of computer vision algorithms for planetary rover navigation.

Main Technologies: MATLAB/Octave.

Skills: Algorithm implementation and development.

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## EDUCATION

**PhD** Dec. 2014

Graduated Queen's University Belfast (Northern Ireland)

**Masters** 2007 – 2008

Cambridge University (UK) , Master of Mathematics. CASM Part III

**Bachelors** 2003 – 2007

Trinity College Dublin (Ireland), Theoretical Physics, BA (mod)

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## TECHNICAL SKILLS

+ [beginner] ++ [intermediate] +++ [expert]

Python. +++

R. +

SQL. ++

BASH. +++

Unix/Linux. +++

MATLAB/Octave. ++

MIDAS (FORTRAN based). ++

IDL. ++

Git. +

Jira. +

AWS (EC3, Lambda, S3). +

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## COMMUNITY INVOLVEMENT

**Feb. 2017 – Jan. 2018**

DataKind, Dublin.

DataKind is a group of data science volunteers working together to help not-for-profit organisations. Part of the work is to demonstrate and educate the NGOs on the power of data science and what it can be learnt from it.

Skills: NPL. Google Analytics. Modeling Intervention Effectiveness. Decision Trees.

**Sept. 2016**

Bogotá, Colombia.

Science teaching in a primary school as part of a three week voluntary placement. Designed and implemented program for all classes which involved 150 kids.

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## Languages

English (native). Spanish (certified B2.4)

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## Personal Interests

Kite surfing, Traveling, Food, Fitness, Teaching and Learning new things.