

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 the much wider world of problems.

I strive to be an active member of the community: organising and participating in international conferences and interdisciplinary workshops, teaching students of all ages and volunteering on charitable data science projects. These opportunities allow me to both share and learn from my colleagues. I look forward to a work environment that encourages this personal development in the rapidly advancing field of data science.

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## EXPERIENCE

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### Research Associate

Leiden University  
May 2014 – May 2016

- Participated in the development of 'Big Data' (1 PB) scientific data archive including data traceability and the collection and validation of data.
- Took a lead role in beta testing of archive and the development of the long term data and software preservation plan.
- Designed and supervised multiple student projects.
- Worked alongside ESA and private companies to develop archive tools.
- Produced high impact research contributing to over 15 published works which together are cited over 400 times.

Main Technologies: Python. SQL. R. Bash. Unix/Linux.

Skills: Statistical Analysis. Data Wrangling. Data Validation. Experimental Design. Functionality design.

### Junior Researcher

ESO, Munich  
DIAS, Dublin  
Dundee, UK  
Oct. 2008 – Nov. 2013

- Based between four different research institutes I developed effective communication skills, an independent work ethic and good project development skills.
- Rigorous testing for biases within data, cleaning methods and analysis.
- Learnt to work as an effective team member locally and remotely.
- Implemented and developed computer vision algorithms.
- Awarded three research grants together worth over € 100,000.

Main Technologies: MATLAB/Octave. MIDAS (FORTRAN based). IDL.

Skills: Time Series Analysis. Data Visualisation and Communication. Data Cleaning. Algorithm implementation and development.

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## TECHNICAL SKILLS

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Python. R. SQL. BASH. Unix/Linux. MATLAB. MIDAS (FORTRAN based). IDL. Bash. Git. Jira. AWS (EC3, Lambda, S3).

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## EDUCATION

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**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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## COMMUNITY INVOLVEMENT

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**Feb. 2017 – Now**  
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 APIs and Analytics.

**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

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