

# Alexander Roberts

<https://sites.google.com/view/alexander-roberts>

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## EDUCATION

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### University of Oxford

Oxford, UK

*PhD in Mathematics; Supervisor: Prof. Alex Scott*

*Oct. 2014 – Oct. 2018*

My thesis consists of six papers spanning Combinatorics and Probability. Through this, I undertook independent research, forged new collaborations, and communicated my work through seminars.

*Master of Mathematics; First class (83%)*

*Oct. 2010 – Jun. 2014*

Areas of study: Probability, Combinatorics, Statistical Lifetime Modelling, Stochastic Differential Equations, Financial Mathematics, and Bayesian Statistics.

## EXPERIENCE

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### Danske Bank

Copenhagen, Denmark

*Senior Quantitative Analyst*

*Oct. 2021 –*

- Twelve months working within XVA team; working on ISDA-SIMM calculations, BACVA calculations, and setting up real time CDS models. Subsequently part of the model team; working on PRIIP calculations.
- Part of the batch monitoring team.
- Working in C++, C#, Python, and F#.

### University of Oxford, Mathematical Institute

Oxford, UK

*Postdoctoral researcher in Mathematics; PI: Prof. Peter Keevash*

*Aug. 2019 – Dec. 2020*

- Carried out research in Combinatorics and prepared papers for publishing in collaboration with others.

### Merton College

Oxford, UK

*Lecturer and Tutor*

*Oct. 2014 – Sep. 2020*

- Organised and taught small-group tutorials for undergraduates in a range of Mathematics courses.
- Co-ordinated with Prof. Alex Scott and others regarding academic and welfare matters.
- Interviewed prospective undergraduate students.

### Selex-ES (now Leonardo)

Luton, UK

*Systems Engineer Intern*

*Jul. 2014 – Sep. 2014*

- Researched applications of Stochastic Differential Equations and Statistical Filters in the defence industry.
- Ran simulations of radar tracking and clock drifts in Matlab.

### University of Oxford, Statistics Department

Oxford, UK

*Summer Research Student; Supervisor: Prof. Matthias Winkel*

*Jul. 2013 – Sep. 2013*

- Researched limiting distributions of Population Models and prepared a paper for publishing.

### Viacom International Media Networks

London, UK

*Market Data Analyst Intern*

*Sep. 2011*

- Wrote a product mapping algorithm in VBA for Excel.
- Collaborated with the development team on implementation.

## OTHER SKILLS AND ACTIVITIES

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**Danish:** B2 CEFR (Prøve i Dansk 3 - 12.0)

**Bridge:** England junior international player 2010–2017, England junior international coach 2017–  
England junior champion 2017, Austrian champion 2017.

**Squash:** University first team player 2012–2018, captain 2017–2018  
KSK team member in Danish elite division.

## REFERENCES

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**Prof. Peter Keevash, University of Oxford**

Email: keevash@maths.ox.ac.uk

**Prof. Alex Scott, Oxford University**

Email: scott@maths.ox.ac.uk

**Dr. Michał Przykucki, risk modeller at G-Research.**

Email: michal.przykucki@gmail.com

Previously a postdoc at Oxford University with whom I collaborated.