# **Alexander Roberts**

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

Address: 10 Oblats, unit #807, Ottawa ON K1S 5X4

Mobile: +45 29 64 82 63

Email: alexpr2000@hotmail.com

## **EDUCATION**

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, Information Theory, Statistical Lifetime Modelling, Stochastic Differential Equations, Financial Mathematics, and Bayesian Statistics.

### EXPERIENCE

Danske Bank

Senior Quantitative Analyst

Copenhagen, Denmark

Oct. 2021 - Feb. 2024

- Most development work in C++, with some in C#, F#, Python, and C++ to C# and Excel interfaces.

- Member of model team; developing pricing library and unit testing.

Desk quant for equity; providing support to traders, and developing equity models.

Additional responsibilities running and coordinating yearly PRIIPs calculations.

- Member of team responsible for overnight calculations; monitoring and supporting batch.

- Previously desk quant for XVA; working on regulatory calculations, and creating real time models.

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 ACTIVIES

**Languages:** English - native

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

**Hobbies:** Ex-international bridge player - England junior champion 2017, Austrian champion 2017

Competitive squash player - Oxford University 2012–2018, KSK (Danish elite division) 2021–

I also love running and getting out on a standup paddleboard

#### References

Dr. Maximilian Seifert, first vice president at Danske Bank

Prof. Alex Scott, Oxford University

Email: scott@maths.ox.ac.uk

Email: on request

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

Email: michal.przykucki@gmail.com

Previously a postdoc at Oxford University with whom I collaborated.