



# Samuel J. Davenport

Mathematician - Statistician - Neuroscientist

## Web

[sjdavenport.github.io](https://sjdavenport.github.io)

## Git

[github.com/BrainStatsSam](https://github.com/BrainStatsSam)

## Mail

[samuel.davenport@stats.ox.ac.uk](mailto:samuel.davenport@stats.ox.ac.uk)

## Born

24/03/1994

## Research Interests



## Education

- 2016-2020 **University of Oxford - PhD in Statistics on the OxWaSP program**  
Working with Professors Thomas E. Nichols and Armin Schwarzman on developing statistical methods for image analysis with applications in Neuroimaging, Astrophysics and beyond. Specializing in Random Field Theory, Multiple Testing and Selective Inference.
- 2012-2016 **University of Cambridge - Masters in Mathematics**  
Distinction, coming 20th in the year out of 240 students and 1st in my college. Thesis on Network Change-point Detection in fMRI data.
- 2010-2012 **IB (International Baccalaureate) Diploma: 43/45 points**  
Higher Level Mathematics, Physics and Chemistry all 7 (highest mark).

## Research Internships

- 07/19-08/19 **Technion - Israel Institute of Technology**  
I will be working with Professor Armin Schwarzman and Dr. David Azriel. We will be continuing our work on peak detection.
- 01/19-03/19 **University of California San Diego**  
I spent 2 months working with Professor Armin Schwarzman at UCSD. We worked on developing confidence regions for the locations of peaks in a random field.
- 07/16-08/16 **Mercedes and the University of Cambridge**  
I worked with the Mercedes Racing Team fitting mixed effects models to help improve car performance.
- 06/15-07/15 **STATSLAB - Department of Statistics at the University of Cambridge**  
I worked with Professor Chris Rogers on analyzing the distribution of financial time series and the
- 06/14-08/14 **STATSLAB - Department of Statistics at the University of Cambridge**  
I worked with Professor Nathanael Berestycki on analysis of the adjacent transposition shuffle.

## Publications

Samuel J. Davenport and Thomas E. Nichols. Selective peak inference: Unbiased estimation of raw and standardized effect size at local maxima, bioRxiv preprint, 2019.

## Awards

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|------|--|
| 2016 | <b>King's College Cambridge - Part III Mathematics Prize</b>                                     |
| 2011 | <b>Silver Medal - British Mathematics Olympiad</b><br>Came 29th out of around 1100 participants. |

## Other Interests

I dance competitively (Lindy Hop, Acrobatic Rock n Roll, Salsa and others) and play squash.  
I also enjoy cooking and baking.