

# THOMAS DELANEY

(+353) 0861275282  $\diamond$  delanet@tcd.ie

4 Victoria Place, Bedminster

Bristol, UK  $\diamond$  BS3 3BP

## EDUCATION

---

### University of Bristol

*Sept 2016 - Present*

Candidate for a PhD in Computer Science

Research in computational neuroscience.

Focusing on statistical modelling of the fluorescence of calcium indicators and the activity of large populations of neurons.

Conferences: Presented posters at the BNA Festival of Neuroscience 2017, COSYNE 2018, Nottingham 2019, etc.

### University of Edinburgh

*Sept 2014 - Sept 2015*

MSc in Informatics

Thesis in ‘How informative are retinal ganglion cell responses about visual stimuli?’

Modules included: Neural Computation, Machine Learning & Pattern Recognition, Reinforcement Learning, Neural Information Processing, etc.

Overall Result: Distinction

### Trinity College, Dublin

*Sept 2007 - June 2011*

B.A. in Mathematics

Including two years of Theoretical Physics

Final Year Project on Quantum Topos Theory

Poster Project entitled ‘Biomechanics of Human Motion’

Modules included: Mathematical Neuroscience, Introduction to Information Theory, Functional Analysis, etc.

Overall Result: 1.1

### St. Peter's College, Wexford

*Sept 2002 - June 2007*

Leaving Certificate - 550 points

A1 results in Maths, Physics, Technical Drawing

## EXPERIENCE

---

### University of Bristol

*Sept 2016 - Present*

*Teaching Assistant/Invigilator*

*Bristol, England*

- Teaching Assistant for a variety of courses, Applied Statistics, Algorithms, Machine Learning, Computational Neuroscience etc.
- Prepared workshop for prospective computer science students on university open day.
- Exam invigilation for a number of academic years.

### CheckRisk

*June 2018 - September 2018*

*Research Internship*

*Bath, England*

- Internship at financial risk assessment company.
- Researched cutting-edge forecasting methods including statistical, machine learning and hybrid methods.
- Applied these methods to financial data to evaluate domain suitability.

**Edinburgh Airport Ltd.***Data Engineer*

Jan 2016 - Aug 2016

*Edinburgh, Scotland*

- Worked as a key member of the Airport's Digital team with a mandate to change every interaction with the airport using technology, data and innovation.
- Main responsibility involved taking in data available from around the business and extracting insights quickly and at low cost.
- Worked with teams such as Commercial, Security, Airfield, Forecasting and Planning to extract, transform and load data, making these datasets useful for these teams, and Edinburgh Airports senior management.

**First Derivatives. Plc***Consultant Software Engineer*

June 2011 - Aug 2014

*Newry, Ireland*

- Worked as a software engineer on in-house projects, and as a consultant for different financial companies and institutions.
- Four months as kdb+ consultant in Morgan Stanley New York offices, working on the creation and upkeep of a large historical and real-time financial database.
- Four months as kdb+ consultant and team leader in off-shore development centre for Morgan Stanley.
- Seventeen months as kdb+ consultant in a highly responsible role in the London based hedge fund Marshall Wace Asset Management.
- Final three months in team-leader role utilising in-house software for performance reporting on First Derivatives FX trading platform.

**Trinity College Mathematics Dept.***Summer Intern*

May 2010 - Aug 2010

*Dublin, Ireland*

- Composed a project entitled 'The Historical and Mathematical Development of Maxwell's Equations'.
- The objective of this project was to detail the development of Maxwell's equations from a scientific and mathematical point of view.
- Attended weekly meetings with the project supervisor from the Mathematics Dept.
- Ensured part of this project would be suitable for use in the Classical Field theory or Classical Electrodynamics course in Trinity college.

**TECHNICAL STRENGTHS**

---

<b>Computer Languages</b>	Python, Julia, Matlab, Bash, q/kdb+, Java, c++, Batch Scripting, $\text{\LaTeX}$
<b>Protocols &amp; APIs</b>	FIX messaging protocol, Geneos monitoring API
<b>Databases</b>	kdb+, MySQL
<b>Tools</b>	git, SVN, Vim, crontab, Autosys, Eclipse, Scoop for Parallel Processing

**SCHOLARSHIPS**

---

Bristol PhD studentship, funded by the EPSRC

University of Edinburgh Informatics UK/EU Master's Scholarship 2014/2015

Exempt from Senior Freshman Mathematics Final Exams by virtue of Trinity Foundation Scholarship exam results.

**ACHIEVEMENTS**

---

<b>Academic</b>	Consistently excellent academic performance in a number well reputed of universities.
<b>Professional</b>	Working in Morgan Stanley within 3 months of finishing undergraduate degree. Maintaining a consistently high standard of work in every environment.

## OTHER INTERESTS & SKILLS

---

**Spoken Languages**

English (fluent), Gaeilge (proficient), French (basic)

**Sport**

Weightlifting, Boxing, GAA (member of University of Edinburgh Gaelic Football Team), Soccer

**Reading**

Sport or Maths related non-fiction, Irish fiction, etc.

**Gambling Technology**

Using my coding and software knowledge to predict the outcomes of games and matches.