# Finlay Maguire

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## **EDUCATION**

#### **UCL**

PhD in Bioinformatics

Dec 2015 | London, England A multi-omic analysis of the photosynthetic endosymbioses of Paramecium bursaria

#### **OXFORD UNIVERSITY**

MA (HONS) IN NATURAL SCIENCE (BIOLOGICAL SCIENCES) May 2011 | Oxford, England

## WORKSHOPS

#### **TAUGHT**

Python and Advanced Python Machine Learning for Life Sciences Genomics and Transcriptomics Unix and Perl Image Processing with Python Software Carpentry Bootcamp Supervision of Masters and Undergraduate Researchers

#### **ATTENDED**

Gaussian Processes for Global
Optimisation 2015
Gaussian Process Summer School 2015
EMBO YIP PhD Course 2013
Woods Hole Molecular Evolution
Workshop 2012
MOOCs in Machine Learning,
Mathematical Logic, Linear Algebra,
Databases, Algorithms, Analysis of
Algorithms, Probabilistic Graphical
Models, Statistics, Data Analysis,
Automata Theory, Music Theory

# SKILLS

#### **PROGRAMMING**

Over 5000 lines:

Python • Shell • R • LATEX

Over 1000 lines:

C++ • matlab/octave • perl • CSS • AWK

• SQL

Familiar:

Verilog • Javascript (inc. D3.js) • Go •

**HPC Linux Sysadmin** 

#### **MOLECULAR BIOLOGY**

{transcript,gen,metabol}-omics • nucleic acid extraction • culturing • cloning • microscopy

### **EXPERIENCE**

#### UNIVERSITY OF EXETER | Postdoctoral Fellow

March 2016 - Present | Exeter, England

#### **NEUROGLYCERIN** | Co-FOUNDER

Aug 2014 - Present | Edinburgh, Scotland

- Competitive Machine Learning Team.
- Top 5% finishes in two major international competitions.
- Solutions coding collaboratively using standard software development methods (VCS, TDD).
- Deep methods, model combining strategies, classical methods, computer vision, feature engineering approaches all used extensively in various competitions.

#### NASA | PLANETARY BIOLOGY FELLOW

July 2013 - Aug 2013 | Kennedy Space Center, Florida

- NASA representative and scientific adviser to BBC "Cloud Lab" Documentary.
- Researched bacterial adaptations to extreme near-space conditions.
- Designed and implemented trials for a stratospheric balloon flight.
- Work resulted in a publication and journal front cover image.

#### **BIOMAP EGYPT** | RESEARCH ASSISTANT

July 2008 - Aug 2013 | Sinai, Egypt

- GIS project monitoring biodiversity in the Sinai Desert.
- Involved in sampling, collection and preliminary data analysis in isolated and challenging conditions.

# CONFERENCES

2015	Poster	School of Informatics Jamboree
2013	Invited Talk	EMBO YIP Meeting
2013	Poster	EMBO: Comparative Genomics of Eukaryotic Microorganisms
2012	Poster	National Association for Research in Science Teaching
2012	Talk	Tennessee Maths and Science Education Research
2011	Poster	Systematics Association: Young Systematists Forum
2011	Poster	SGM Summer Conference
2011	Poster	EMBO: Comparative Genomics of Eukaryotic Microorganisms

2015 Invited Talk Introduction to Machine Learning for Life Sciences Workshop

## **AWARDS**

2015	University	Informatics Jamboree Prize
2015	57 <sup>th</sup> /1049	National Data Science Bowl
2014	16 <sup>th</sup> /527	American Epilepsy Society Seizure Prediction Challenge
2013	Global	NASA Planetary Biology Fellowship
2013	Global	Earth and Space Foundation Exploration Award
2013	Europe	FEMS Young Scientist Meeting Grant
2011	Europe	FEMS Young Scientist Meeting Grant
2011	National	SGM Meeting Grant
2010	National	SGM Harry Smith Vacation Studentship
2009	University	Dukinfield Exhibition in Biological Sciences

# PUBLICATIONS

7 publications including Proceedings of the National Academy of Sciences, Royal Society B, and Current Biology. See goo.gl/04fiwt for full citation list.