

Charlie Nash

charlie.nash@ed.ac.uk

Education

The University of Edinburgh

Centre of Doctoral Training in Data Science

Edinburgh

2015 – present

Thesis: *Scene understanding using parts-based 3D shape models - Development of methods for scene understanding tasks such as pose estimation by leveraging the growing supply of 3D models available in online databases.*

Supervisor: *Prof. Christopher K. I. Williams*

The University of Edinburgh

MSc(R) Data Science, Distinction (79%)

Edinburgh

2014 – 2015

MSc Project: *Modelling 3-D Object Classes - Investigation and implementation of a probabilistic model which generalizes graphics models of object classes.*

The University of Edinburgh

BSc Mathematics, First Class Honours (79%)

Edinburgh

2010 – 2014

Final Year Project: *The Mathematics of Music - An exploration of group structure within music, with a focus on PLR-operations and their extension to 7th chords through generalised contextual transformations.*

Work Experience

The University of Edinburgh

Principal's Teaching Award Summer Project

Edinburgh

July 2014 – Sept 2014

- Worked with the school of mathematics teaching team on the prediction of student exam performance.
- Modelled student exam performance using attendance, coursework and class test data.
- Produced tools to automatically generate summaries/visualisations of overall year performance.

Imperial College London

NIHR Research Methods Internship

London

June 2013 – Sept 2013

- Worked in the department of Epidemiology and Biostatistics on a project modelling road accidents in the UK.
- Contributed to development of a spatial Bayesian model for road accidents.

Teaching

The University of Edinburgh

Machine Learning and Pattern Recognition Marker

Edinburgh

September 2016 – Present

- Marked and provided detailed feedback for class assignments.

The University of Edinburgh

Algorithms, Data Structures and Learning Marker

Edinburgh

January 2016 – May 2016

- Marked and provided detailed feedback for class 'learning' assignments.

The University of Edinburgh

Probability with Applications Class Tutor

Edinburgh

January 2016 – May 2016

- Prepared and delivered tutorials to groups of undergraduate students.

The University of Edinburgh

Machine Learning and Pattern Recognition Class Tutor

Edinburgh

September 2015 – December 2015

- Prepared and delivered tutorials to small groups of MSc students.

Publications

Generative models of part-structured 3D objects, C. Nash and C. Williams, Neural Information Processing Systems (NIPS), 3D Deep Learning Workshop, 2016.

Overcoming Occlusion with Inverse Graphics, P. Moreno, C. Williams, C. Nash and P. Kohli, European Conference of Computer Vision (ECCV), Geometry meets Deep Learning Workshop, 2016.

Awards and Achievements

- Awarded Keycom Scholarship worth £1000 a year for academic achievement.

Computing Skills

Advanced: Python, Matlab, LaTeX

Familiar: R

Others: Git, Bash, Tensorflow, HTML