

Advice and Guidance on MSc Projects

Please note that a project registration form must be submitted to us by no later than **Wednesday of week 7, Hilary Term (1st March 2017)**. It should be handed to Sarah Retz-Jones (room 112).

In addition to this, you will need to submit a project proposal. The project proposal must be handed in to Sarah Retz no later than **Monday of week 1, Trinity Term (24th April 2017)**.

Available projects can be found here:

<http://www.cs.ox.ac.uk/teaching/studentprojects/MScInCS>

Project Registration

You should submit the registration form with either a single project title, together with a signature of the supervisor, or a list of at least three projects for which you have (or are doing) the stated prerequisites. We would encourage you to talk to potential supervisors and select a specific project if possible. However, if you are not able to do this, then the Projects Committee will endeavour to find a suitable person to supervise one of the projects you have listed. If you do supply a list projects you are interested in, then please make sure that they are selected from at least two different possible supervisors.

Although some students do projects that are jointly supervised with another department you should remember that the project has to be relevant to computer science and should demonstrate your understanding and ability to exploit and integrate the material you have learnt from the courses you have taken.

Please note the regulations stipulate that you must demonstrate a link between your project and the taught part of the course.

In making your choice of project, you may wish to look at previous projects held in the Library and online here: <http://www.cs.ox.ac.uk/msctheses>. Below are some of the project that were awarded a distinction in the MSc in Computer Science in 2014, 2015 and 2016:

Student name	Year	Project title
Assael, Ioannis-Alexandros	2014	<i>Bayesian Optimization for Heteroscedastic Functions</i>
Bhatti, Shehroze	2016	<i>Playing Doom with Deep Reinforcement Learning</i>
Bigourdan, Pierre-Yves	2016	<i>Distributed and Multi-Threaded Learning of Regression Models</i>
Bogdanovic, Miroslav	2014	<i>Deep apprenticeship learning for playing video games</i>
Campbell, Simon	2015	<i>Non-uniformities in the RC4 Stream Cipher</i>
Chan, Iat	2015	<i>Input Method Engine by Long Short Term Memory Recurrent Neural Network</i>
Cheng, Jianpeng	2014	<i>Investigating the Role of Prior Disambiguation in Deep-learning Compositional Models of Meaning</i>
Das, Sudakshina	2014	<i>Information Flow Analysis and Handling Library Calls</i>
Demiraj, Alban	2014	<i>Deep Learning for Natural Learning</i>
Devlin, Matthieu	2014	<i>Predicting Graphical Passwords</i>
Edwards, Davidson	2016	<i>Prototyping a Web-based Framework to Interface with Human Resource Allocation Algorithms and Compare Human Resource</i>

		<u>Assignments</u>
Fouilloux, Clement	2014	<u>Analysis, Design and Modelling of DNA Biosensors</u>
Funke, Ignacio	2016	<u>The Span Construction Interpretations and Applications</u>
Han, Dongge	2016	<u>Mixed Strategy Nash Equilibria in Boolean Games</u>
Hunter, David	2016	<u>Improving Exploration in Deep Reinforcement Learning</u>
Jin, Lin	2015	<u>Communication Efficient Distributed Optimization</u>
Kanjanabose, Rassadarie	2014	<u>An Empirical Study on Parallel Coordinates and Scatter Plots</u>
Kotzias, Dimitrios	2014	<u>Multi-Instance Deep Learning</u>
Li, Shijian	2014	<u>Verifying Haskell Programs Using Higher-Order Model Checking</u>
Lind, Christine	2016	<u>Wearable Sensors for Post-Op Joint Rehabilitation</u>
Liu, Siqi	2016	<u>txt2calories: Nutrition Estimation via Natural Languages</u>
Lyon, Aurore	2014	<u>Novel QRS-based biomarkers for risk stratification in hypertrophic cardiomyopathy</u>
Markovikj, Dejan	2014	<u>Deep Apprenticeship Learning for Playing Games</u>
Moscholios, Nicolaos	2016	<u>Automated Visualised Translation from English to British Sign Language</u>
Mossalam, Hossam	2016	<u>Multi-Objective Deep Reinforcement Learning</u>
Ocampo, Ernesto	2016	<u>A Fast Molecular Double Docking Algorithm for Catalysis Prediction</u>
Penman, Richard	2016	<u>Web Data Extraction Optimization: From User Interaction To Web Server Communication</u>
Perez Orozco, Bernardo	2015	<u>Learning relational structures from birdsong</u>
Prastitis, Angelos	2016	<u>Inconsistency-Tolerant Query Answering On Probabilistic Databases</u>
Rathje, William	2016	<u>A Rapid Method for Constructing Perceptually Uniform Color Spaces from User Surveys</u>
Sadde, Alberto	2016	<u>Consolidation of Haskell Programs Semantic fusion of maps, filters and folds</u>
Schleich, Maximilian	2015	<u>Learning Regression Models over Factorized Joins</u>
Shakespeare, Hillary	2014	<u>Making Clicks More Valuable: Increasing Engagement with Interactive Surveys</u>
Sher, Varshita	2015	<u>An Empirical Study on Perception of Correlation using Scatter Plots</u>
Snorrason, Arni	2016	<u>Visual Representation of Constraint Satisfaction Problems</u>
Tena Cucala, David	2016	<u>Datatype Reasoning in PAGODA</u>
Tissier, Antoine	2016	<u>Computer models and classification algorithms for drug cardiac assessment</u>
Turc, Iulia-Raluca	2014	<u>Recurrent Neural Networks for Statistical Machine Translation</u>
Whitaker, James Meredith	2014	<u>Steganalysis in Overlapping Images</u>
Whitby, Max	2015	<u>The Construction and Verification of Asynchronous Components Built from Chemical Reaction Networks</u>
Wijesuriya, Viraj	2015	<u>An integrated approach to model learning and model verification</u>
Zhelezniak, Vitalii	2016	<u>Boosting Radial Threshold Classifiers</u>

Please make sure that you also read the section in the [MSc Course Handbook](#) on projects.

Please also be aware that in Trinity Term there will be a session on writing skills. All students are expected to attend as this will provide you with helpful guidance for your project. Details on the time and location will be provided nearer to the time.

Project proposals fall into two categories: there are specific proposals put forward by members of the department which can be discussed with the academic concerned, and

some members of the department have put forward general areas in which they would be prepared to supervise projects.

If you have a project of your own in mind you can discuss it with the academic whose interests fall into this area.

Please complete the Project Registration Form and return it to Sarah Retz-Jones in room 112 by **Wednesday of week 7, Hilary Term (1st March 2017)**.