



**Applying for a D.Phil in Computer Science & CDT in Autonomous
Intelligent Machines & Systems**

David Kay, Director of Graduate Studies
Wendy Poole, CDT Centre Administrator

DPhil in Computer Science at Oxford?

The Department of Computer Science:

- ▶ Top in the UK and 3rd in the World
- ▶ Excellent academics and over 150 DPhil Students
- ▶ Both sophisticated theory and engagement with applications
- ▶ Approx 70 academic and 140 research staff

AIMS CDT/Engineering Department

- Over 30+ Excellent academics in the area of the CDT across Computer Science and Engineering Science
- 133 academic staff and 250 research staff, and 420 research students in the Engineering Department
- Oxford ranked first among global universities
- Department of Engineering Science is ranked 3rd in the world, behind Caltech and Stanford

Research Themes

<http://www.cs.ox.ac.uk/research/> <http://aims.robots.ox.ac.uk/>

- Algorithms & Complexity Theory
- Artificial Intelligence & Machine Learning
- Automated Verification
- Computational Biology & Health Informatics
- Cyber Physical Systems
- Foundations, Structures & Quantum
- Human Centred Computing
- Information Systems
- Programming Languages
- Security

AIMS

- Robotics, Vision and Perception
- Machine Intelligence and Multi-Agent Systems
- Control & Verification
- Networked Sensing and Actuator Systems

How to Apply

- ▶ Consider your match against selection criteria
- ▶ Identify a research topic and consider potential supervisors
- ▶ Prepare a personal statement. This will be assessed for your past commitment to sustained and intense study, your reasons for wishing to undertake research in the area of autonomous intelligent machines and systems and how the interdisciplinary approach in the CDT will be of benefit in this context (**AIMS**)
- ▶ Apply online: references, transcripts, proposal
- ▶ Attend interview if shortlisted (often by skype)
- ▶ Automatically considered for funding if apply by January deadline
- ▶ Accept / reject offer (if successful)

DPhil/AIMS Admission Criteria

- ▶ 1st class or strong 2.i degree/GPA 3.6/4.0
- ▶ Either 4 year undergraduate degree or 3 year undergraduate degree followed by Distinction in Masters in a relevant subject
- ▶ GRE or GMAT scores are not required
- ▶ Strong support from referees
- ▶ High overall position in the cohort; awards and prizes
- ▶ **To be considered for funding:** excellent 1st, GPA 3.75 minimum or Distinction in Masters
- ▶ Good match with faculty research interests

AIMS

- ▶ 1st class or strong upper second-class undergraduate degree (or equivalent), as a minimum in computer science, engineering, physics, mathematics, statistics or other related disciplines. (A previous master's qualification is not required)
- ▶ Minimum GPA 3.7
- ▶ Strong support from references
- ▶ High overall position in the cohort; awards and prizes
- ▶ Good match with research themes
- ▶ Higher level language required if first language not English

WHAT HAPPENS AT INTERVIEW?

- ▶ What is your existing knowledge?
- ▶ Discuss previous projects you have undertaken e.g. MSc dissertation.
- ▶ Technical questioning in the relevant field.
- ▶ Discuss research interests and possible research directions. This is tied to your research proposal presented in your application.

Research Proposal/Statement of Research Interests – about 2 pages

Key ingredients:

- ▶ What is your research topic? What are the key challenges? Describe general area of research
- ▶ What are you trying to do? Explain without using jargons.
- ▶ Why is it interesting / difficult?
- ▶ Summarise current research and refer to existing papers
- ▶ Could describe a research problem and your initial ideas on research work towards solving this or open problems
- ▶ What is your approach? What is new? Need to have some understanding of the state of the art.
- ▶ What difference will it make if you are successful?
- ▶ Include your relevant skills and experience, your reasons for applying to Oxford, and list some of the principal reasons why you consider yourself a strong applicant.

Prepare a personal statement. This will be assessed for your past commitment to sustained and intense study, your reasons for wishing to undertake research in the area of autonomous intelligent machines and systems and how the interdisciplinary approach in the CDT will be of benefit in this context (**AIMS**)

DPhil Admissions for 2019

Application deadlines

- ▶ 11 Jan 2019 – deadline for scholarship applications
- ▶ 1 Mar 2019
- ▶ Apply online as soon as application is ready – do not have to wait until deadline – can start application and return at later date
- ▶ Specific studentships advertised at any time
- ▶ Applications likely to be closed after March deadline except for specific studentships

Application fee £75

Readmission Candidates

Students currently studying MSc or MFoCS at Oxford

- ▶ Must apply by the same deadlines
- ▶ Same paperwork as external students
- ▶ ... but no fee

Not applicable for current undergraduates.

Scholarships and Funding for 2019

Various funding allocated by department from:

- ▶ Oxford-Google DeepMind Graduate Scholarships
- ▶ EPSRC Scholarships
- ▶ Clarendon Scholarships
- ▶ Oxford Wolfson Marriott Graduate Scholarship
- ▶ Departmental funding
- ▶ Ad hoc studentships advertised throughout the year
- ▶ Industry Scholarships

Strong competition and some eligibility restrictions

Funding allocated by University and college

<http://www.ox.ac.uk/feesandfunding/prospectivegrad/scholarships/>

Sources of information

How to find out about

- ▶ **Research topics:** departmental webpages
<http://www.cs.ox.ac.uk/research/>
and contact potential supervisors
- ▶ **Application process and scholarships:** see departmental webpages
<http://www.cs.ox.ac.uk/admissions/graduate/dphil-computer-science/>
and University web pages:
<http://www.ox.ac.uk/admissions/graduate>
<http://aims.robots.ox.ac.uk/>

Any Questions contact Graduate Office:

- ▶ Julie Sheppard, Graduate Studies Administrator
- ▶ David Kay, Director of Graduate Studies
- ▶ Daniel Kroening, Deputy Director of Graduate Studies
- ▶ Wendy Poole, CDT Centre Administrator
- ▶ Mike Osborne, CDT Director
- ▶ Alex Rogers, CDT Co-director