PhD Induction: Department of Computer Science 2018-19

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Welcome

- Welcome to the Department of Computer Science (CS).
- The Department is part of the School of Electrical Engineering, Electronics and Computer Science (with the Department of Electrical Engineering and Electronics).
- We are part of the Faculty of Science and Engineering.
- My name is Clare Dixon. I am the Department's Director of Postgraduate Research.
- Much of the information provided today is on the Department's internal web site intranet.csc.liv.ac.uk, in particular that providing information for PhD students intranet.csc.liv.ac.uk/research/pgr/
- The best way to contact me is by email (cldixon@liv.ac.uk).

Key People

- Your supervisors (first and second).
- Two members of your *Independent Progress Assessment Panel* (IPAP) to assess your progress annually and offer additional support.
- Departmental Director of Postgraduate Research - Clare Dixon.
- School Administrative support - Alison Goodyear and Joe Sheridan.
- Department Administrative support - in particular Helen Bradley and Rebekah Martin.
- Technical Support - Departmental Technical Support Team.
- PhD Representatives who sit on the Staff Student Liaison Committee (SSLC).

What is research?

The Frascati definition of research from the relevant Organisation for Economic Cooperation and Development (OECD) manual.

Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

The Research Excellence Framework (REF 2014) definition.

For the purposes of REF, research is defined as a process of investigation leading to new insights, effectively shared.

[From the PGR Code of Practice]

The Requirements of a Research Degree I

Doctorates are awarded to students who have demonstrated:

- the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline, and merit publication;
- a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of an academic discipline or area of professional practice;
- the general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems;
- a detailed understanding of applicable techniques for research and advanced academic enquiry.

The Requirements of a Research Degree II

Typically, holders of the qualification will be able to:

- make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences;

- continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas, or approaches; and will have:

- the qualities & transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent environments.

[From QAA UK Quality Code for Higher Education]

What is involved in a PhD at Liverpool?

- Research on some topic for (usually) 3-4 years leading to a thesis.
- This is defended during a viva with both an internal and external examiner.
- Satisfying formal progression requirements (submission of a annual report and interview with your IPAP).
- Undertaking a development needs analysis and carrying out core and additional training and development relating to development of skills, communication, ethics, employability etc.
- Engaging with the University systems such as recording of monthly supervisory meetings and completing the APR.

More details of all these issues are available via the Departmental web pages.

Requirements of a PhD at the University of Liverpool

The degree of PhD will be conferred upon candidates who have demonstrated the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality, as adjudged by peers, to extend the forefront of the discipline, by submitting for assessment a substantial body of original work, in the form of one of the following:

1. A thesis of no more than 100,000 words containing the results of the candidate's original research, which may contain published papers integrated into the thesis in a coherent and structured manner;

2. . . .

[From Ordinance 57(A) Degree of Doctor in Philosophy (applicable to students who commenced their studies in 2014-15 and subsequently)]

Liverpool Doctoral College

Since 2015 the University has established the Liverpool Doctoral College aiming to

- enhance the overall PGR experience;
- provide innovative doctoral training;
- support a thriving doctoral community; and
- deliver tailored employability and entrepreneurial provision.

Liverpool Doctoral College-Components

- Induction
- Community–engagement with other PhD students and enhancement of our PhD provision.
- Development
    - Development Needs Analysis–complete in year one and update every year;
    - Core Training (School and Department Training);
    - Personal and Professional Development (PPD) training offered at University/Faculty level
        - Communication;
        - Research Methods;
        - Ethics and Governance;
        - Impact;
        - Employability and Entrepreneurship.
- Placements – pilot scheme launched for placements of a minimum of 15 days.

Development Needs Analysis/Training and Assessment Plan

We identify core training that you are expected to carry out and list other optional development.

This is provided on the PGR web pages and as part of your Training and Development Plan (TAP).

You will carry out a Development Needs Analysis (DNA) annually with your supervisor and be able to identify and participate in additional development training opportunities.

Together these form your individual training plan.

Please see the PhD web pages (`intranet.csc.liv.ac.uk/research/pgr/`)

Transferable Skills

The training and development provided as part of your PhD help develop your **transferable skills** such as

- communication, negotiation and interpersonal skills,
- problem solving,
- initiative and self motivation,
- working under pressure and to deadlines,
- organisational skills,
- team working,
- ability to learn and adapt,
- numeracy, etc.

These are skills important to employers alongside your research, technical and subject knowledge and are sometimes termed **employability skills**.

Annual Progression (University Requirements)

- Record of Supervisory Meetings
    - You must keep a record of at least 12 formal meetings you have had with your supervisors. This includes agreed targets etc.
    - You must enter these via the Liverpool PGR Toolbox (see PhD web pages)
    - There are guidelines on the PGR Team web page.
    - This is carried out each year (June to May) and you must have at least 12 per year, one per month (pro-rata in year one). This is a University requirement.
- PGR Portfolio of activity
    - To record all additional training, research development and achievements and other personal or professional activities, along with research skills gained by this progress.

Record of Supervisory Meetings (Cont.)

The formal recording of 12 supervisory meetings per year, one per month is required. This is a University wide requirement.

- The University view this as a professional requirement and part of good practice.
- It is used to show engagement with your PhD.
- It is used to provide a formal record of meetings (showing they have happened and can be used in appeals).
- It is part of the formal University regulations– a bit like exams on the taught programmes.
- It is used to satisfy the UK Visas and Immigration requirements in relation to visas.
- Other Universities do something similar.
- Alison/Joe will try and remind you if you fall behind.

Year 1 Core Training and Progression Requirements

University/Faculty

- Taking ownership of your PhD (one day workshop)
- Professional conduct and ethical employment practices
- Completion of annual progression requirements including record of supervisory meetings
- Complete Annual Progress Report (APR) via Liverpool Life (June).

School

- Project Plan (Jan)
- First Year Progress Report (May)
- Progress Interview and Presentation (June)
- Doctoral Training Seminars (ongoing)

Department

- Attend CS Postgraduate Workshop (May)
- Attend CS Research Seminars (ongoing)

Year 2 Core Training and Progression Requirements

University/Faculty

- Careers Development Options
- Faculty Poster Day
- Completion of annual progression requirements including record of supervisory meetings
- Complete Annual Progress Report (APR) via Liverpool Life (June).

School

- Second Year progress Report (May)
- Progress Interview (June)

Department

- Present your work at the Postgraduate Workshop (May)
- Attend CS Research Seminars (ongoing)

Year 3 Core Training and Requirements

University/Faculty

- Careers Development Options
- Completion of annual progression requirements including record of supervisory meetings
- Complete Annual Progress Report (APR) via Liverpool Life (June).

School

- Finishing Your PhD: Thesis, Viva, Training (seminar)
- Third Year progress Report (May)
- Progress Interview (June)

Department

- CS Technical Presentation
- Attend CS Research Seminars
- Attend CS Postgraduate Workshop

Additional Training

- Subject related modules: it might be useful to attend some of the Department's year three or MSc modules (see the Departmental web site). This should be discussed with your supervisors.

- Skills workshops: the LDC/Development Team/Faculty provides optional skills workshops e.g. relating report writing, giving technical presentations etc.

- The Centre for Life Long Learning may also run events of interest.

- The English Language Unit offers writing courses for international students.

- Development opportunities from Liverpool Doctoral College (eg placements)

There are links from the PhD web site.

Formal Progress Monitoring

Annually your progress on the PhD is monitored as follows.

- Complete the School Core Training for your year and any other training identified.
- Complete the Annual Progression Requirements (Record of Meetings and PGR Portfolio of activity).
- Complete Annual Progress Report (APR) via Liverpool Life (June). This is a summary of your progress over the year, completed by you, your primary supervisor, the DDPR and the PGR Team.
- Complete a progress report and interview (in May/June for those staring in Sept/Oct). This is assessed by your two IPAP members and borderline or unsatisfactory progress is considered by the PhD Progress Committee.

Formal Progress Monitoring (Cont.)

- You will receive written feedback from your IPAP members in relation to the progress report/interview.

- If there are concerns raised with respect to your progress you will usually be given some time to recover (eg repeat the End of Year Progress Report/Interview, write a technical document, etc).

- Continuing unsatisfactory progress may result in the termination of your studies or being asked to complete an MPhil rather than PhD.

- Lack of engagement with the University e.g. due to not meeting with supervisors, not carrying out meeting records or completing required reports or interviews etc (without good reason) may mean you are deemed withdrawn.

Research Environment: Seminars

- The Department runs a seminar series on Tuesdays 13-14.
- You are strongly encouraged to attend these to further your knowledge of Computer Science research.
- This is a great opportunity to learn about current research in Computer Science from experts in the area as well as a chance to practice listening and understanding skills and observe presentation techniques.
- Details about the talks are available on the Departmental web site.
- You can suggest (UK-based, or close to UK) speakers via your supervisor.

Research Environment: Research Groups

Members of the Department are well known internationally for their contributions to the theory and practice of computing.

In the 2014 Research Excellence Framework 97% of the Department's research activity was judged as world-leading or internationally excellent.

The Department is split into two sections.

Algorithms Section	Artificial Intelligence Section
Algorithms, Complexity Theory and Optimisation	Argumentation and Representation of Knowledge
Economics and Computation	Data Mining and Machine Learning
Networks and Distributed Computing	Robotics and Autonomous Systems
	Verification

Research Environment: Research Groups (Cont.)

- Research students usually are associated with one or more of these often the group their supervisor is associated with.
- Discuss this with your supervisor and contact the relevant group leader.
- It is useful to find out what research other group members are doing and talk to them as it may help with your own research.
- Most research groups also run group seminars. Talk to your supervisor to find out about these.
- Take opportunity to give a seminar to your research group.
- You are strongly encouraged to write papers relating to your research during your PhD and present these at conferences. This provides external feedback on your work.

Technical Support: The Help Desk

- The Computer Science Department runs a Help Desk facility - a single point of contact for all queries relating to the Departmental computing facilities (both hardware and software), and available to both students and staff.
- This is different from the Computing Services Help Desk, which is NOT located in our building, which is the contact for all queries about the University computer systems.
- The Help Desk is located on the 2nd floor of the George Holt building, near to the blast door between the George Holt and the Ashton buildings.
- Help Desk operates 10.30–12.30 and 2–3.30pm Mon–Fri (closed Wed pm) during normal term times. It does not run at weekends or out of term.

intranet.csc.liv.ac.uk/department/helpdesk.html

csc-helpdesk@liverpool.ac.uk

Administrative Support

- Alison Goodyear and Joe Sheridan (eeecspgr@liverpool.ac.uk), desk on ground floor Ashton Building and also EEE are the School Administrators for Postgraduate Research Students.
- Alison/Joe can help with PGR administration issues.
- Helen Bradley and Rebekah Martin (ground floor Ashton Building) can also help with any Departmental or day to day issues.
- There should be a shared key number 62 in your office that opens the labs, meeting rooms and resource room. Helen/Rebekah also have one in their office you can borrow for short periods.
- The resource room (ground floor Ashton) contains a photocopier, stationary, etc. Please sign in the book if you take any stationary.

Studentships/Finance

- If you have a DTG/University/School/Departmental Studentship please check how long this is for so there are no surprises.

- If you have any queries in relation to this please contact the Departmental finance administrator Elaine Smith (esmith@liverpool.ac.uk ground floor Ashton Building). The School Finance officer is Angela Winker.

- Additionally Debbie Henderson (dhenders@liverpool.ac.uk) deals with EPSRC funding.

- Bookings for any any travel that is being funded via the Department or School or via Research Support Fees should be booked through the finance team (eeecsfin@liverpool.ac.uk).

Who and Where to Find Advice

- Your supervisors are the first place to ask for help and advice.
- You could also discuss issues with your IPAP members.
- For administrative issues please contact Alison/Joe, finance issues Elaine, technical support the CS Help Desk.
- Any other issues please ask me.
- You can also approach any other staff member you feel comfortable.
- The University has many support services, the counselling service, international student support services, financial support services, disability support, mental health services etc www.liverpool.ac.uk/studentsupport/.
- The Student Guild also offers a range of advice and support: academic, housing, financial, health and wellbeing www.liverpoolguild.org/advice/.

How to give Feedback

If you have any constructive criticism about your experience as a PhD student we would be happy to hear.

This can be fed back directly to Alison or I, to your supervisors or via the PhD student representatives on the Postgraduate Staff Student Liaison Committee.

- Thomas Carroll (4th year)
- Xia Cui, Tom Spooner (3nd year)
- Flavia Alves (2nd year).

We are looking for additional representatives on the SSLC. Please contact Alison if you are interested.

Every two years formal feedback is collected via the Postgraduate Research Experience survey (PRES) allowing us to improve our PGR provision.

Graduate Teaching Assistants (Demonstrating)

- PhD students in the Department of Computer Science are encouraged to assist with Departmental teaching of small groups.
- This involves running laboratories or example classes or marking.
- This is paid.
- You must complete the relevant training– Graduate Teaching Assistant (GTA) Demonstrator Workshops
- The lecturer in charge of the module should provide a session to explain what is expected from you
- Please contact Michele Zito (michele@liverpool.ac.uk) for more details.

Tea Room/Tea Club

- You are welcome to use the tea room (ground floor Ashton Building) to have lunch/tea/coffee etc.
- Please help keep this clean and tidy and wash up the crockery that you use.
- The tea/coffee/milk in the tea room needs to be paid for. Please see the saucer for individual contributions.
- Alternatively the Department runs a tea and coffee club (see Dave Shield D.T.Shield@liverpool.ac.uk) which purchases the tea and coffee in the tea room. If you wish to join please contact Dave.

Safety and Security

- The fire alarm is tested once a week. If you hear a continuous fire alarm should should leave the building as soon as possible. We have regular fire drills.
- An intermittent alarm indicates that the full alarm is going off in the adjacent building. You don't need to evacuate the building but shouldn't enter the adjacent building.
- The out of hours book located on the Building Manager's desk in the Ashton building.
- If you're in the building out of normal working hours please remember that it's important to put your name, location and time in and out in the book. In the event of an accident or emergency Security will need to know who's around.
- There should also be a similar book in the Holt building.
- Any questions please contact Phil Jimmieson (`phil@liverpool.ac.uk`).

Health and Safety

- Helen Bradley is the Departmental first aider. Please contact her if you need any first aid. Accidents that happen in the Department should be reported.
- If you need to contact security their number is 2222.
- You should have a safe working environment, i.e. your chair, table, etc should suitable. Please let Phil know if there are any issues.
- If you are ill please let your supervisor know. If you are ill for an extended time you should request a suspension (talk to your supervisors about this). Note this may have visa implications for international students.
- The University has a Disability Support Team www.liv.ac.uk/studentsupport/disability/. Please contact them if you need support.
- Sleeping in the office overnight is not allowed.

Final Words

- We hope you will have a happy and productive time as a PhD student in Liverpool.

- Research is the key thing.

- Remember you should also complete the School core training and development, identify and carry out any other necessary training, and carry out the progression requirements.

- Make use of the opportunities that are available.

- Please let me know if there is anything I can help with.