Phd Monitoring in the
Computer Sciences Laboratory
at The Australian National University

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Abstract

The CSL conducts its own communal pizza-led Phd monitoring process on the last Thursday and Friday of March and September of each year. The aim of monitoring is threefold: to pinpoint problems with progress or with supervision as early as possible; to ensure that Phd students are capable of giving good oral presentations; and to obtain feedback on their work from others. This document explains the process, explains the duties of academic staff members, and gives some pointers on how students can carry out the Phd monitoring to minimise stress and maximise gains.

A pdf version of this document can be found at: monitoring.pdf

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1 Introduction

This document is an informal description of the monitoring carried out by the Computer Science Laboratory (CSL) to guide our PhD students to successful completion and to improve the supervision given by our staff. The aspects of PhD monitoring mandated by the CSL appear first. Other aspects of the overall monitoring process are mandated by ANU, CECS, RSISE and NICTA and appear briefly at the end with pointers to where further information can be found.

Some staff members, particularly from NICTA, seem to believe that CSL PhD monitoring is a burden which can be safely ignored. Other staff members seem to relegate it to a very low priority, meaning that they are away on the days set aside for PhD monitoring. It is only natural that their students then believe this too. If PhD monitoring is to succeed, it is essential that staff members put aside the required days: see “Dos and Don’ts”.

Some students see monitoring as an onerous and unnecessary burden which only distracts them from their research. Others see it as a “test” and become stressed and distracted from their research by spending too much time on the monitoring process. Neither of these is our intention, so “Dos and Don’ts” outlines ways in which you can minimise stress and maximise gains.

Of course, if you can see ways to improve or streamline our monitoring process, please contact Rajeev Goré with your suggestions.

2 Glossary

CECS: http://cecs.anu.edu.au/
RSISE: http://rsise.anu.edu.au/
CSL: http://csl.anu.edu.au/

Head of Department of the CSL: is Bob Williamson
Associate Dean (Research Training): who has the responsibility for the College’s Higher Degree by Research (HDR) programs, is Jochen Trumpf
PhD Monitor for CSL: is Rajeev Góre

n months after commencement is with respect to the start date of your PhD program. Thus if you started your PhD on the 1st of January 2008, then “6 months after commencement” means 1st of July 2008

n months active in program is with respect to the start date of your PhD program but taking into account any suspensions which have been taken out
of the Phd program. Thus if you started your Phd on the 1st of January 2006 but suspended your Phd for 3 months while doing an internship at ExploitingStudentsRUs.com in early 2007 then “18 months active in program” means 1st of October 2007.

3 CSL Monitoring

3.1 Why
A review of CSL Phd completions in the late nineties showed that we had quite a poor record of completion compared to other departments in the college. Even worse, some Phd students who failed to complete were only months away from completion and may well have finished their degrees if we had caught their problems earlier. The current Phd monitoring process was therefore put into place with three primary aims: to pinpoint problems with progress or with supervision as early as possible; to ensure that Phd students are capable of giving good oral presentations; and to obtain feedback on your work from the faculty at large.

3.2 When
The CSL monitoring usually takes place on the last Thursday and Friday of March and September each year. This way, everyone can make plans well in advance.

The monitoring days are divided into three discrete chunks corresponding to the three groups within the CSL: Diagnosis and Planning (DPP); Logic and Computation (L&C); and Machine Learning (ML).

But there is no hard and fast rule, so if you prefer one of these days for sensible reasons, and you have checked availability with your supervisory panel, then please request well in advance for your talk to be scheduled on that day.

3.3 What

Students Each student is allocated a 30 minute slot. Each student gives a 20 minute presentation about the progress of his or her research and plans for any future research. The following 10 minutes are set aside for questions and feedback.

The length of the presentation is deliberately chosen as most conference presentations are 20 minutes long. It is vital that you learn to stick to the time limits as it will help you in your conference presentations. You will soon find that it is actually harder to give a good short talk rather than a good long talk.

The presentations should be directed at a general computer science audience rather than specialists in a particular research area. It is perfectly okay to report on the work that has been carried out since the previous monitoring process as long as you set the scene at the beginning of your presentation.
Academic Staff Members  Academic staff members and students are expected to attend the talks of all students in their group and give constructive feedback on the quality and style of all the presentations they attend. A simple way is to write down points on a piece of paper during the presentation and pass the comments to the student for later discussion. Positive comments are equally as important as negative ones, and comments like “It was not that bad, I have seen worse” are not exactly helpful!

Staff are expected to mark the set dates in their diaries well in advance and not make other plans for these dates. NICTA staff are given adjunct status in CSL specifically so they can supervise PhD students so they are expected to participate fully in PhD monitoring.

Staff and Students  Soon after the presentations, all staff members in a research group (and members of supervisory panels, if possible) shall meet and review the progress of all students in that research group in private. They shall also discuss the quality of the supervision of each student and provide constructive feedback to the supervisors and supervisory panel as is considered appropriate.

After these discussions, each student in the research group shall also meet with the staff members. The purpose of this meeting is for the staff to provide the student with constructive feedback on his or her progress. It is also an opportunity for the student to raise whatever issues the student feels are relevant to the progress of his or her research, including problems with supervision. Later on, further feedback from the monitoring process may also be provided to students by their supervisor.

Any major problem highlighted by this meeting, or any other part of the monitoring process, shall be brought to the attention of the Head of Department (Bob Williamson) or, in case the Head of Department is directly involved, the Associate Dean (Research Training) (Jochen Trumpf).

3.4 Who

All staff and students are expected to attend the talks given by all students in their group, but are welcome to attend all talks if they wish. To encourage a collegiate atmosphere, a pizza lunch is provided by the department on each of these days for those who attend the talks on that day.

It is particularly important that academics and students avoid taking personal leave during these dates if possible.

I have anecdotal evidence from one PhD L&C-student who attended all ML talks from his first day that doing so was an easy way to gain expertise in another field gradually and with little time overhead.

All students must participate in this process, but small adjustments can be made subject to prior approval from the PhD Monitor who is currently Rajeel Goré. Note the word “prior” in the preceding sentence.
3.5 Where
After much consideration we have decided to hold the monitoring in the (Ground Floor) Seminar Room, RSISE Building 115 on the campus of The Australian National University. See: http://maps.google.com.au/maps?near=north+and+daley+road+anu&q=anu+north+and+daley+road&

3.6 Mentoring
Sometimes it helps to talk about your problems or perceived problems with other students. We have therefore asked more senior students to volunteer to act as “mentors” for beginning students. Hopefully, you will have been assigned such a mentor during your college induction. If you do not have a mentor, but wish to have one, then please contact Rajeev Goré.

3.7 Additional 18 Month Seminar and Interview
In addition, CSL requires each Phd student to give a one-hour departmental seminar on his or her research and to participate in an interview with the supervisory panel and the Head of Department after approximately 18 months active in the program.

The seminar should outline completed research and should outline further work that will be carried out to complete the Phd. Ideally, the student should be able to present a map of actions which will lead to successful and timely submission of the dissertation.

The interview typically touches on issues like: adequacy of supervision; planning for a career post Phd; industry internship or placements; plans for post-docs; and any problems encountered so far.

To reduce needless duplication of monitoring, this 18 month interview and seminar is usually concomitant with the written College 18 month review and can replace one CSL monitoring process: discuss it with your supervisors and Rajeev Goré to request which monitoring process it should replace (usually the immediately following or preceding one).

3.8 Dos and Don’ts
First Monitoring Session  Your first monitoring session may well occur only a few weeks after you have started. But we are required to ensure that the scholarship money that we disburse is spent wisely. Therefore, at your first monitoring, you will be expected to motivate your research by answering the “Tax Payer Question”: why should the Australian Taxpayer fund your research?

This does not mean that we fund only applied research or research with direct commercial value. It is okay to say “Because it is an interesting question for the following reasons ...”. But you had better be able to articulate the reasons. The purpose is to ensure that you have thought about this issue prior to embarking upon your research.
Of course, if your first monitoring session is only days from your start date, and you have not yet worked out your research area, then you will be excused from the Tax Payer Question: just contact Rajeev Goré in advance.

**What if I fail?** The CSL Phd monitoring is **not** a test! It is perfectly okay to give a weak presentation as long as you are then able to articulate in the subsequent group discussion why your progress has been impeded and how you might go about removing the impediments. Flag your problems early so we can help you to improve your situation.

**What if other students are better?** The CSL Phd Monitoring process is also not a competition! You will not be judged against other students. So feel free to try out something new if you want. The important thing is to improve your presentations as you progress through your Phd.

**When should I start to prepare for Phd Monitoring?** The CSL monitoring process should not be onerous. It is recommended that you start preparing your presentation on the Monday prior to your monitoring so that you spend only about four working days on it. Of course, you should have familiarised yourself with the appropriate slide-preparation package beforehand if you intend to use overhead slides. It is also wise to practise beforehand to ensure that you finish in the allotted time.

**Absence for reasonable reasons** Absences from Phd monitoring are permitted for sound reasons. Requests for missing Phd monitoring should be made well in advance by emailing Rajeev Goré and Diane Kossatz. Holidays are not a sound reason but attending a conference is.

**Technology Failure** One of the most embarrassing yet recurring problems you will see is laptop failure of some description. Contact the CSL IT staff well in advance and check your presentation prior to the monitoring. Ideally, come with a PDF file on a memory stick so that you can just use the built-in computer in the seminar room. You have been warned!

**What if all my supervisors are away?** They should not be away as all academic staff are expected to put the Phd monitoring dates aside well in advance. Contact Rajeev Goré as soon as you know of any unexpected absences.

**Feedback Failure** If you get inadequate feedback, particularly from your supervisors, then contact Rajeev Goré. If Rajeev Goré is your supervisor then contact Jochen Trumpf.
Videotaping your presentation?  It may be possible to ask our IT support staff to videotape your presentation so that you can see yourself in action afterwards. I am still investigating this idea so contact me (Rajeev Goré) if you wish to pursue this idea.

What if my problem is with my supervisor?  If you encounter problems with your supervisor, then contact the Head of Department of CSL (Bob Williamson) at the earliest possible stage. If the Head is your supervisor then contact the Associate Dean (Research Training) (Jochen Trumper). It is perfectly okay to ask to switch supervisors and even your topic, but do it earlier rather than later!

4  ANU/CECS Monitoring Requirements

The ANU monitoring requirements are outlined briefly below:

3-6 months after commencement: research plan

9-12 months after commencement: 1st research progress report + thesis proposal review

18 months active in program: bi-annual study report

24 months active in program: 2nd research progress report

30 months active in program: bi-annual study report

33 months active in program: oral presentation or departmental seminar

36 months active in program: 3rd research progress report

All written reports are submitted via the web using

https://studentdb.rsise.anu.edu.au/

Questions about these requirements should be directed to Marie Katselas and Jochen Trumper.

More details can be found at:

University Requirements:  

RSISE requirements:  
http://cecs.anu.edu.au/graduate/current/programs/rsise04_guidelines

NICTA requirements:  
http://cecs.anu.edu.au/graduate/current/programs/nicta/anu_supervisor

The RSISE and NICTA requirements are in addition to the ANU requirements, except where two reports would be due at roughly the same time. In that case the relevant report due according to RSISE or NICTA is filed by us to satisfy the ANU (no action needed by the student).
I guess the other thing that could be mentioned there probably under the ANU requirements section is that the reason the database reports are worth doing is that they ask the questions you need to have an answer to anyway - ie "why am I doing this?", and they should be seen as a tool to aid you in your own planning as much or more than something that is required of you. I think it was when I got that answer that I stopped just getting annoyed at filling in the forms.

Words of wisdom from a CSL PhD Student