

The Proposal and Presentation Plan

Prof. Chris Johnson,
School of Computing, University of Glasgow.

Johnson@dcs.gla.ac.uk

<http://www.dcs.gla.ac.uk>

Introduction

The Trends in Information Security course is assessed using a proposal, presentations and class participation for 30% of total marks and by an exam; worth the remaining 70%. This document briefly describes the organisation of the proposals presentations. MSc students have to choose their strand by **24th January 2014**.

For more information, see the course web site: <http://www.cs.gla.ac.uk/~johnson/teaching/security>.

It is impossible for an individual to cover all of the areas of research in information security. In consequence, each person will select one area. There is a list of potential topics and guidance notes on the web site, mentioned above. There is also a document helping you to propose your own topic if the existing suggestions do not look sufficiently interesting.

Your task is to find, read and analyse a number of research papers on the topic. You then have to give a presentation to the rest of the class. The time available and the schedule will be discussed in the first few weeks of the course and a schedule published on the web pages. The talk will be marked, as will your participation in asking or answering questions after the each talk. Hence if you miss too many other presentations then your final result will be affected.

First Select Your Topic

You need to identify an area for your presentation. The title of the course is Trends in Information Security but this can be broadly interpreted. I have suggested a number of topics – for example, Security in the Cloud, Security of Safety-Critical Systems, Mobile Forensics, Security and Civil Liberties, Threat Analysis for Cyber-Security, Security Policy and Security Management Systems, the 2013 Proposed Cybersecurity Directive and Cyber Incident Reporting, Infrastructure vulnerabilities and Global Navigation Satellite Systems (GNSS). However, these topics are only initial proposals and you should feel free to suggest your own topics. If you do this then please read the guidance on the course web site and mail me as soon as possible. You **MUST** finalise your choice and let me know by the **12th February 2014** or you will not have sufficient time to complete the presentation.

Preparing a Proposal (20%)

You have to prepare a 4 page grant proposal for your chosen research topic. This should be submitted by the 5th March 2014. You may choose any topic related to the research area, as approved by the strand co-ordinator. No two students may choose the same topic. It is each student's responsibility to suggest a topic to the strand co-ordinator by the deadline.

The proposal is a 4-page outline Case for Support (CfS), as defined by Research Councils UK addressing the key assessment criteria and giving an indication of the resources being requested. The minimum acceptable font is size 11, and the minimum margin in all directions is 2cm. It should include:

Background

- Introduce the topic of research and explain its academic and industrial context.
- Demonstrate a knowledge and understanding of past and current work in the subject area in the UK and abroad. In particular, it cannot be based on only one research paper.

National Importance

- Describe the extent to which, over the long term, for example 10-50 years, the research proposed:
 - contributes to, or helps maintain the health of other research disciplines, contributes to addressing key UK societal challenges, contributes to current or future UK economic success and/or enables future development of key emerging industry(s)
 - meets national strategic needs by establishing or maintaining a unique world leading research activity (including areas of niche capability)
 - fits with and complements other UK research already funded in the area or related areas, including the relationship to the EPSRC portfolio and our stated strategy set out in “[Our Portfolio](#).”
- The extent to which applicants are able to address each bullet point will depend on the nature of the research proposed. Applicants should indicate how their research relates to EPSRC’s [research areas and strategies](#) (many projects will be relevant to more than 1 EPSRC research area).
- The definition of National Importance and further details can be found at [preparing new proposals to include National Importance](#).

Academic Impact

- Describe how the research will benefit other researchers in the field and in related disciplines, both within the UK and elsewhere. What will be done to ensure that they can benefit?

Research Hypothesis and Objectives

- Set out the research idea or hypothesis.
- Explain why the proposed project is of sufficient timeliness and novelty to warrant consideration for funding.
- Identify the overall aims of the project and the individual measurable objectives against which you would wish the outcome of the work to be assessed.

Programme and Methodology

- Detail the methodology to be used in pursuit of the research and justify this choice.
- Describe the programme of work, indicating the research to be undertaken and the milestones that can be used to measure its progress. The detail should be sufficient to indicate the programme of work for each member of the research team. Explain how the project will be managed.

Note: Lists of references and illustrations are included in the four page limit.

Preparing a Presentation (10%)

For the presentation, you should develop no more than 15 slides using a software package of your own choosing. However, it is your responsibility to ensure that any presentation/associated audio visual resources run on the PC in the lecture room. The aim of the presentation is to identify the problem that your research helps to address. You must summarise different viewpoints/results. You must comment on the methodologies used to obtain those results and also explain any weaknesses with these various approaches. We are assessing your ability to take technical material and identify the key points as they relate to the security of critical information infrastructures.

As mentioned the presentations account for 10% of the marks in this course. You cannot resit this component because we cannot guarantee your place on next year's presentations. Marks will be allocated using the following criteria:

- Identification of the research question and relationship to information security;
- Summary of alternate views;
- Description of research methods;
- Strengths and weaknesses of the research methodologies;
- Participation in other presentations.