



Faculty of Health, Science and Technology
Computer Science

Syllabus

Peer reviewing in Computer Science

Course Code: 7DAV008
Course Title: Peer reviewing in Computer Science
Peer review inom datavetenskap
Credits: 2 ECTS
Degree Level: Doctoral

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology, 14, December, 2016 and is valid from the autumn semester 2016.

Language of instruction

Instruction and reading materials will be given in English.

Prerequisites

The student must be enrolled in a PhD program in computer science, computer engineering or related subjects. The student shall be able to read scientific articles in English.

Learning Outcomes

After completing the course, students will be able to:

- Scientifically judge and comment independent an article with respect to the quality of presentation, credibility, novelty, scientific evidence, ethics, and scientific methodology;
- Identify strengths and novel contributions in scientific articles;
- Identify and criticise weaknesses in scientific articles while providing constructive feedback to the authors;

In addition, the student will be aware of and consider in future review work:

- The risk of own bias when providing peer review;
- Subjectivity in judging research;
- Conflicts of interest in reviewing other scientist's work;
- Ethical end professional etiquette of peer review

Course Content

The course will provide an introduction to peer review, issues with peer review, and a critique of peer review through reading assignments and individual or group discussion.

The course will show examples of peer review reports on various levels of quality.

Practical peer reviewing will be performed on articles provided by the course instructor. Reviews will receive written feedback with recommendations for improvement from the examining course instructor.

Reading List

See separate document.

Examination

The course is examined through written peer review reports. The student will complete 5 peer review reports, including advisor feedback and improvement rounds.

Grades

Pass-fail examination. One of the grades Fail (U) or Pass (G) is awarded in the examination of the course.

Quality Assurance

The course convenor has a duty to encourage a continuous dialogue on learning processes and goal fulfilment. A written evaluation is carried out at the conclusion of the course combined with a joint student-teacher discussion of all aspects commented on. The result of the evaluation is collated and made available in accordance with *The Higher Education Ordinance*, Chapter 1, § 14.

Course Certificate

Course certificate is issued on request.



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Reading List

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Books

I. Hames, Peer review and manuscript management in scientific journals: guidelines for good practice: John Wiley & Sons, ISBN 047075026X , 2008.

E. Wager, F. Godlee, and T. Jefferson, How to survive peer review: Wiley-Blackwell, 2002.

<http://www.bmj.com/sites/default/files/attachments/resources/2011/07/wager.pdf>
accessed 2016-Nov-10

Compendia, articles, web pages

I. Parberry, "A guide for new referees in theoretical computer science," Information and computation, vol. 112, pp. 96-116, 1994. <http://larc.unt.edu/ian/pubs/referee.pdf>
accessed 2016-Nov-10

C. Wenneras and A. Wold, "Nepotism and sexism in peer-review," Nature, vol. 387, pp. 341-343, 1997.

U. Sandström and M. Hällsten, "Persistent nepotism in peer-review," Scientometrics, vol. 74, pp. 175-189, 2008.

R. Smith, "Peer review: a flawed process at the heart of science and journals," Journal of the royal society of medicine, vol. 99, pp. 178-182, 2006.

Pram Devanbu: Review Antipatterns, web page, 2006,
<http://homes.cs.washington.edu/~mernst/advice/review-antipatterns-devanbu.txt> ,
accessed 2016-Nov-10

Robin Murphy : Reviewing Papers: A Student Guide, web page, 2003,
<http://web.archive.org/web/20080414163138/http://www.csee.usf.edu/~murphy/Students/reviewing.htm> , accessed 2016-Nov-10

Alan Meier: How to review a technical paper, web page, 1992 ,
<http://web.archive.org/web/20100918104754/http://eetd.lbl.gov/ea/buildings/alan/publications/how.to.review.html> , accessed 2016-Nov-10

Mema Roussopoulos: How to write a review (Harvard CS 264), handout, 2005,
<http://www.eecs.harvard.edu/~mema/courses/cs264/reviews.pdf> , accessed 2016-Nov-10