582519 Scientific Writing for MSc in Computer Science: Ethics of writing

Lecture 4, 25.9.2012
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Last week’s task:
How did it go?

-- fill comments here --

List of references and its structure
Honesty and ethics of science

- Science is based on trust
  - Researchers are honest
  - Research is ethical
- Honesty
  - Ideas, results, and conclusions presented are new
  - Assumptions are not presented as facts
  - Truth is not misrepresented
- Violation of these norms of behaviour is a serious matter!
Reviewing / Refering

- Criticising and analysing others' work
  - Research article
  - Theses, reports, seminar work
- Important part of the scientific process
- Should be objective and fair
- Referee statement
  - Analysis of the contents of the article
  - Not evaluation of the author or his/her working place
Conflicts of interest in referring
- Personal or employment relationship
- Competition for an appointment
- Conflicting ideas/opinions
- Too similar research interests/ideas

A suspicion of non-objectiveness
=> refuse the referee task
**Reviewing / Refering (3)**

- **Confidentiality**
  - As referee you are not allowed to publish the articles or parts of them
  - Not even allowed to show others, if not an assisting referee

- **Totally out of line**
  - Suggest rejection
  - Use the ideas/results as a basis for referee's own work
The most obvious form of unethical behaviour in science

Attempt to get honour of work that somebody else has done

Using existing material without citing to the original work, or citing it inadequately

Intentional and unintentional plagiarism
  - disregard of the norms of ethical behaviour
  - ignorance of those norms
Plagiarised material

- Plagiarised material can be
  - ideas
  - results
  - text, pictures, figures, tables
  - whole articles or part of them

- Sources of the plagiarised material
  - published articles
  - web pages
  - newsgroup articles
  - e-mail message, ....
Forms of plagiarism

- Use of others’ ideas or results without acknowledgements
- Direct copying of material
  - without citing the source
  - citing the source, but not indicating the exact quotation
- Using material with inappropriate or inadequate citations
  - What part of the text the citation covers?
Forms of plagiarism (2)

- Copying the structure of a source

- Using pictures
  - Copying of a unique picture (by scanning or re-drawing it) always plagiarism
  - If modified from its original form (even translated), the source must be indicated

- Self-plagiarism
Self-plagiarism

- Copying/reusing one's own text (previous work)
  - Exception: an extended/complete version of a conference/workshop paper that is published in a journal

- Multiple articles based on same results
  - Publishing improper unless full cross-referenced
  - Simultaneous submissions to different publication forums must be disclosed
Self-plagiarism (2)

- Against good ethics
  - Even the description of the background of the work should always be rewritten
  - A member of a research group cannot use texts of the other group members

- Question of copyright
  - Publication forum has usually the rights for the presentation
  - Author has the rights for his/her ideas!
Each author of an article should have some contribution to the contents of it
- Implementing an algorithm not enough
- Giving feedback not enough
  => mentioned in Acknowledgements

Preferred: contribution to ideas, experimentation and analysis

Authors must give their permission for authorship

Being a member of a research group does not automatically give the authorship
Authorship (2)

- Postgraduate studies
  - Student and supervisor together
  - Supervisor should not publish alone results that the student has obtained
  - Student should not publish the results without consulting the supervisor

- Order of the authors
  - Alphabetical order by last names
  - The author with the biggest contribution first
Publishing on web pages

- Articles published only in authors' or research groups' web pages
  - Intention to publish as a conference, workshop or journal article
  - Can be considered by a publication forum as published
  - Usually not refereed

- Articles already published in a conference, workshop or journal
  - Not always allowed
  - When allowed, must typically include the copyright notice of the publisher
Detecting plagiarism

- Usually it is easy to tell when someone has copied text

- Language changes
  - Language style varies
  - Fluency of text varies
  - Terminology changes
    - especially if copied from different places and sources
  - Words not a normal part of the writer's style and vocabulary
Detecting plagiarism (2)

- Digital copies of articles make copying easy
  - **BUT** they can be easily found also by the referees and teachers!

- Our university and department **do not tolerate plagiarism**, i.e. copying the work of others

- Technical tools are used for detecting plagiarism and checking the originality of submitted reports, seminar works and theses!
Consequences of plagiarism

- Article is not published
- Lost of reputation
- Lost of a job
- Even jail
- ...
Consequences of plagiarism (2)

- Thesis/report/seminar work is not accepted
- Course is failed
- Course must be retaken
- ...
- Student will lose the study right, i.e., is thrown out of the university
Avoiding plagiarism

- Take model of others work (outlining, writing, citing), but don't copy them

- Cite your sources

- Make it clear what is the origin of your text
  - Distinguish what you state and what the others have stated
  - Paraphrase the ideas of others
Avoiding plagiarism (2)

- Show direct quotations with quotation marks (even direct translations) and proper citations

- Make your own pictures, tables, etc.

- Give in the list of references only those articles that you have read and cited
Paraphrasing

- Writing the ideas of some other authors in your own words
  - Without changing the original meaning
  - Paragraph structure not the same
  - Sentence structure not the same
  - Words not too similar to the original

- Requires that you understand what the others have stated

- Paraphrasing can also help to understand a difficult text
Paraphrasing (2)

- Basic process
  - Read the source and understand it
  - Write/paraphrase the contents with your own words
  - Check your version against the original
  - Revise if necessary

- Different approaches of paraphrasing (writing)
  - Read the source, put it a side, and do not look at it, while writing
  - Read the source and take notes, have a break, use the notes while writing
  - Paraphrase while looking at the source
Paraphrasing (3)

- Key steps of the paraphrasing process
  - Changing the structure
    - Paragraph structure
    - Sentence structure
    - Keep just the main and most relevant ideas
  - Changing the words
    - Keep specialised words and terminology, i.e., shared language
    - Find alternative words and expressions for other words and phrases
      - Thesauruses, dictionaries
Paraphrasing is an iterative process
- Start by changing the structure, not the words
- Change the words
- Make further changes to the structure
- ...

Several iterations may be needed!
Misrepresentation

- Occurs when
  - the results obtained improperly described and/or overstated
  - the value of previous work diminished

- Description of the results
  - Accurate, precise, correct, truthful
  - All restrictions explained
  - Both negative and positive results reported
  - Detailed enough so that experiments can be repeated
Misrepresentation (2)

- Unintentional mistake is not misrepresentation
- The most serious form: totally incorrect statement(s)
- Other forms:
  - Underestimating previous work
  - Emphasising own results (even preliminary or somehow restricted)
  - Omitting unsuccessful experiments and their results
  - Omitting the change history of web documents
Sources

- Books
Sources (2)

- Online guides, for example,
  - Writer's Handbook of University of Wisconsin-Madison (USA)
  - Online writing lab of University of Purdue (USA)
  - Writing skills guide of the Royal Melbourne Institute of Technology (Australia)
  - Justin Zobel's page with links to Technical writing and research ethics