## Research Skills

#### Advanced MSc and PhD Students

http://www.cs.bham.ac.uk/~jxb/rs.html

# Lecture 11 Writing abstracts

Andrea Soltoggio

http://www.cs.bham.ac.uk/~aqs

- "An **abstract** is a **brief summary** of a research article, thesis, review, conference proceeding or any in-depth analysis of a particular subject or discipline"
  - "... often used to help the reader quickly ascertain the paper's purpose."
  - Immediately after the title of a paper
  - It may act as a **stand-alone entity** in lieu of the paper
  - "Abstracts help one decide which papers might be relevant to his or her own research."

(quotations form Wikipedia)

## Types of abstracts

#### • Descriptive

- Short (up to 100 words)
- Includes: purpose of the work, method, scope
- Might not include: results and conclusions

#### • Informative

- Fairly short (up to 200 words)
- Includes: purpose, method, scope, results and conclusions

#### • Critical

- Is a short review written by a reviewer (not the author(s))

## Descriptive abstracts

- Suitable for talks and presentations
- Describe the purpose and scope of the work in a concise and compelling way
- May trigger the reader's curiosity
- Suitable when the work has not reached definitive conclusions

## Informative abstracts

- Concise, clear and compelling
- *Structured*: it has a introduction-body-conclusion structure
- The structure of the abstract reproduces the structure of the paper
- *Connected*: provides connections between the parts of the abstract
- Adds nothing new: close summary of the paper, it does not add new information or analysis

## Informative abstracts - Don't's

- Repeat the title
- Refer to things outside the abstract (remember the stand-alone property)
- Do not include references to literature, figures or tables
- Do not use abbreviations

## Informative abstracts - Tips

- Sentences should be tied up in a clear, logical order that reproduces the paper essential flow of ideas
- Pay particular attention to the choice of each word (nouns, verbs, prepositions, etc.)
- Be over-critical on your abstract, does it answer the questions:
  - what is the topic and scope of the paper?
  - what is the problem/issue considered?
  - what method is proposed to tackle the problem?
  - what is the main result / contribution? (for informative abstracts)

## Critical abstracts

- Offer a general overview of the paper from a reviewer's point of view
- They are not biased by the author's ideas, but can be biased by the reviewer's ideas
- You can write a critical abstract of a paper as a short review for later reference (this can be also included in your bibtex file)

## Writing - final considerations

The care for writing abstracts can also be employed for writing the rest of the paper (depends on time available)

The same principles of clarity, logical flow, soundness and efficacy apply

How well one writes depends to a good extent on how much one wants to write well (time devoted, care etc)

#### If one thinks that writing is:

- not straight forward (one looks for guides on writing, references...)
- essential for spreading one's ideas that might not be understood if not well communicated
- a fundamental part of research
- Writing quality is likely to be high

- fairly easy and it come natural when research goes well
- secondary in importance to the content and ideas that are the fundamental point
- an additional work at the end of a research project

Writing quality is likely to be low

# Abstract examples and discussions

# Discussion on the abstract for the module presentation