How to write an abstract

Why an abstract is important

Nowadays, the use of on-line publication databases, which typically contain only abstracts, is prevalent. Abstract serves the function of ‘selling’ your work thus it is vital to write a complete but concise description of your work to entice readers into purchasing your article or listening to your presentation.

Parts of an abstract

Despite the fact that the abstract is quite brief it should include the following sections, which are typically single sentences:

Motivation:

Why do we care about the problem and the results? This section should include the importance of your work, the difficulty of the area, and the impact it might have if successful.

Problem statement:

What problem are you trying to solve? State here what the scope of your work is (a generalized approach or for a specific situation). However be careful here to not use too much jargon.

Approach:

How did you go about solving or making progress on the problem? Describe your methodology (simulation, analytical approach, prototype, experiment, etc) and its
most important parameters.

Results:

What is the answer? Put the results here in numbers when possible. Avoid vague expressions such as ‘very’, ‘small’ or ‘significant’ using instead orders-of-magnitude, etc.

Conclusions:

What are the implications of your answer? Tell to the reader if it is going to change the world, be a significant step forward or simply serve as a road sign indicating that this path is a waste of time (all of the results are useful). State also if your results are general or specific to particular case.

Additional tips

• Think about search phrases and keywords to your work and use them in your abstract. This will help others to find your work quickly as it will more likely appear at the top of search result listing.
• PhD students who have only started their projects (do not have results) and wish to present outlines of these projects may write their abstract based on first three sections, namely: motivation, problem statement and approach, which thy plan.
• Meet the word count limitation. A commonly used prescription is 200 words, which corresponds to 1000-1500 characters.

These are only concise guidelines, for more information please, ask Prof Google.