

# **TPT1201 Research Methodology**

## **Assignment 1**

### **Paper Summary Template**

You may do the assignment individually or in a group of 2 (must be within the same tutorial group).

Students will read 1 research paper and prepare a summary of the paper (This should require **TWO to THREE pages** including abstract approximately 1000-1500 words)

Each paper should be relatively recent (published **within the last 10 years**), and within the area approved by your tutor (Your tutor will post the area of research to MMLS announcement – check it out). You may also suggest any area if it does not falls within the proposed area, but you need to get your tutor to agree on this.

The choice of articles should be made from computer science journals/conferences published by IEEE, ACM, Springer, Wiley, etc (e.g., Spectrum, ACM of Communication, IEEE Transactions on Computer, etc.). The size of the research articles should be **at least 8 pages** in length.

Summary should be prepared consistent with lecture notes that includes writing styles, grammar, construction of sentences (mostly active voice), mathematical notations, ethical issues, etc. You may include necessary citation. All citations in your reference section are to be in APA format.

The summary should be in single-column format and prepare using LATEX. You must use at least a **12 point font Times New Roman**.

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**Objective:** The objective of this assignment is to provide the student with knowledge of how to critically review and evaluate a published article from a peer reviewed journal/conference.

#### **Tasks:**

Read through the article carefully and write a report that addresses the following issues:

##### **1. Problem solved:**

What is the main research problem addressed in the article?

**2. Related work/Prior research:**

Briefly discuss the body of literature that is used to motivate the research. You will need to review some of the key articles referenced by the authors. Identify any shortcomings in the prior literature that the selected article addresses. Perform a literature search to determine if there are any relevant articles that have not been cited by the authors.

**3. Methodology:**

Discuss the methodology used for the study. Explain whether you think that the methodology used is an appropriate one (cite references where relevant). Identify possible problems with the methods used. For empirical work discuss the statistical models used and the sources of data for the study. For theoretical work discuss the models and techniques used.

**4. Claimed Contributions:**

Summarize the significant results and contributions made by the authors.

**5. Conclusion:**

Summarize on the overall flow and general contributions of the paper.

**6. What did you learn? And possible extension/Future work:**

Identify possible areas in which the research can be extended. Does the article call for further research on any specific issue? Identify limitations of the article and formulate them as potential research questions.

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**Assignment-1: Summary (two to three pages) (Latex)**  
**(20 Marks)**

Please prepare your summary in the following table format using LATEX:

|  |  |
|--|--|
| Paper Title  |  |
| Author(s)  |  |
| Abstract/Summary   |  |
| Problem Solved   |  |
| Claimed Contributions                                      |  |
| Related work   |  |
| Methodology  |  |
| Conclusions  |  |
| What did you learn<br>(algorithms/experiments<br>details)? |  |
| Possible extension/Future<br>work                          |  |
| References   |  |

## **Assignment-1: Presentation**

**(10 Marks)**

While preparing ppt for presentation it should be consistent with lecture notes covered in presentation/talk lectures.

Time for presentation allocated for every student: 10 Minutes (presentation) + 5 Minutes (QA).

1. Presentation of research results: (5 Marks)
  - (a) Introduction and Problem Statement
  - (b) Critical literature review
  - (c) Research method and results
  - (d) Conclusions
  - (e) What did you learn/possible extension/future work
2. Shows good understanding (e.g. clear, logical and algorithmic, questions answered well). (2 Marks)
2. Time used well during the presentation: good pace, right level of details given the time limit and audience. Presentation finishes on time. (2 Marks)
3. Presentation appears to be well planned and rehearsed and runs smoothly. (1 Marks)