

Procedure to arrive at a probable problem to solve/idea to capitalize- Research perspective

Annexure I

Phase 1 of Building your research paper

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How can refer this document:

Students, Faculty, Academic researchers and Research scholars

How this can be useful:

1. Highly recommended (for your own growth and goodness) to publish a research paper as part of Major Project or budding Ph.D scholars and novice Researchers.
2. Project Guides and the Project Committee can recommend this methodological approach to achieve uniformity and quality

STEP 1: How to arrive a "*topic*"?

1. Google search: Your domain+ "IEEE transactions/Journals like IEEE Transactions/ACM/Elsevier/Springer/SCI or Scopus ranked journal papers.." + "Year"
 - a. Eg: Internet of Things IEEE Journal of Sensors and Actuators 2019
 - b. Eg: Security in IoT IEEE Journal 2018
 - c. Eg: Deep Learning for Health care ACM 2019
 - d. **Avoid Conference papers (IEEE digital explore, etc...)**

STEP 2: How to arrive at "*literature review*"?

2. Related work (Literature review)

- a. Find 15 papers related to your work directly or indirectly.

How to read those papers?

- ✓ Read the abstract and conclusion and write 5 lines on your own based on your understanding (What are the 5 lines to be addressed Refer Point 6).
- ✓ What is special in this paper compared to others? And what is the drawback in that paper.
- ✓ Create a neat tabular column paper/chart (chart preferred) as in **Annexure II (Refer: [Cheat sheet_A to Z_Research paper formulation_2.pdf](#))**

Note: If your genre is Product (Inspire from 4b in IT Major Project Guidelines to handle this)

STEP 3: How to arrive at "*proposed work*"?

3. Proposed work

- a. Architecture diagram/Block Diagram.
b. Explain the proposed model in detail.

STEP 4: How to arrive at "*Inference*"?

4. Inference (Provide more weightage to this point)

- Justify how this proposed work is novel or new compared to existing work.
- Benefits of this work.

STEP 5: Whom to "*Acknowledge*"?

5. Acknowledgement

If any (Eg: Funding agencies, Clubs, Internships etc....)

STEP 6: How to arrive at "*Abstract*"?

6. Abstract (Should be framed considering points 2 to 4)

- A line about general intro

- What is existing?
- What does not exist in current products which lead you to this work? (Drawbacks, Flaws etc..)
- How are you rectifying the above in your work? What is your proposed work?
- How are you showcasing that your results are better? (eg: Comparing results through graph plots, NS2, Matlab etc..)

STEP 7: How to arrive at "*Proposed Title*"?

7. Proposed Title:

Should be deduced or arrived based on point 6 highlighting point 4.

STEP 8 (Optional): Are you aiming for "*Start-up*"?

8. (OPTIONAL Question: Answer this only if the idea proposed is towards start-up creation)

Is your idea aimed with start-up creation in mind: YES/NO

If Yes, let your guide know about it, as they may guide you through the openings, grants etc to help you take it forward.

STEP 9: How to list out "*References*"?

9. References -20 papers (Follow IEEE style)

Explore in-built References tab in Ms-Word

Mendeley tool: (<https://www.mendeley.com/>) Reference Management

Software and Researcher network.

SAMPLE: [1] K. Lorincz et al., "Sensor networks for emergency response: challenges and opportunities," *IEEE Pervasive Computing*, vol. 3, no. 4, pp. 16-23, 2004.

STEP 10: How to order "*Authorship*"?

10. **Authorship Order** (*Note: Do not get mislead, This is no way reflecting the marks split, this is the order in which the authors have to be listed during Research Paper publication, So give due credits to your peers, as you know each of your level of inputs*)

1. Name of person who contributed more to the project.
2. The next least contributor.
3. The next least contributor.
4. The next least contributor.
5. Name of Guiding Faculty (Will be intimated to you)

Note: Any special concerns contact your guide, they will help resolve with their experience

NOTE: (Phase 2 will take you to the next level of depth. This can be done after Xth day, Month, Year, which will be guided/supported by your Guide).

Note:

Refer "*Cheat sheet_A to Z_Research paper formulation_2.pdf*" for methodology to arrive a level 1 Literature review