Literature Review
Methodology to arrive at an idea/problem to address

Annexure II

Phase 1 of Building your research paper

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Pre-requisite for this document:

Please read Annexure I before reading this document.

This is sub set document referred in Annexure I (File path: https://github.com/kayalvizhiJayavel/Research-Paper-Formulation/blob/master/Cheat%20sheet_A%20to%20Z_Research%20Paper%20formulation_1.pdf).

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: Basic Details

Name and Registration Number of Students: *(Note: Follow Authorship Order (**Refer Annexure I**: link above))*

Domain: *(Eg: 1. AI,ML and all its Variants)*

1. *AI,ML and all its Variants / 2. Networks / 3. Application Software, Web Development, Mobile App Development/ 4. Data Science / 5. Internet of Things / 6. Security*

Name of Guide:

STEP 2: Tabulated Score chart

1. Read abstract and conclusion of each research paper and try to answer these 5 questions

- What is the general Introduction about?

- What is existing work(s) mentioned?
- What does not exist in current products which lead to this work proposed by the authors? (Look for Drawbacks, Flaws etc..)
- How are the authors rectifying the above in their work? In short, What is their proposed work?
- How are they showcasing that their results are better? (eg: Comparing results through graph plots, NS2,Matlab etc..)

Below is a sample arrived after reading 5 papers following above steps

SAMPLE FOR REFERENCE (Scores indicate how close the paper matches your need (1 to n, 1:Most close)

Topic: QUANTITATIVE ANALYSIS AND PERFORMANCE EVALUATION FRAMEWORK FOR IoT SYSTEMS APPLIED IN CRITICAL APPLICATION

1. **Related paper list**

S/N	Paper Title	Author	Year	Journal	Ranking Criteria					Score
					Broad Domain	**Existing Systems addressed**	**Drawbacks/ flaws**	**Problem addressed**	**Algorithms/ Tools /Techniques used**	
1.	A Framework for comparing Quantitative and Qualitative Criteria of IoT Platforms	Amirfarad S. et al	2018	ICWR	**IoT analysis**	***Immense development of IoT platforms as services***	Different structure and characteristics of IoT platforms	- Investigation of qualitative and qualitative criteria of (n) platforms - Suggest framework for evaluative	Choose: - Scalability -Reliability -Data dispersion	3

2.	**ScriptIoT: A Script Framework for and Internet-of-Things Applications**	Han-Chuan Hsieh et al.	2016	IEEE INTERNET OF THINGS JOURNAL VOL. 3, No. 4	**IoT Application**	***Construction of many IoT applications***	***Challenge of construction of IoT applications based on the scale of IoT systems.***	***Proposed a script framework as a convenient development interface for service-oriented architecture. Offers both polling an event-driven mechanism for delegating IoT applications to the agent and reporting event of the specified device, contributes to large-applications.***	***ScriptIoT framework to increase the access time and CPU loading compare to others.***	4
3.	**Performance Testing of an Internet of Things Platform**	J. Esquiagola et al.	2017	IoTBDS 2017	**IoT performance**	***IoT usability, connectivity test by simulating the environment***	***Testing an IoT system depends on the specific configuration It needs to consider the H/W platform and the network environment No typical testing strategies/Methodologies***	***Perform stress testing of IoT platforms under different conditions on 3layers: H/W, S/W and User***	- ***Tsung tool as load testing*** - ***Used JUnit for a software tes***	1
4.	**IoT Time**	George S	2017				***Optimal***	***Proposed the***		2

	critical Applications for Environmental Early Warning	et al.		*ECAI 2017*	**Environmental**	***Catastrophic and accidental effects on the community to be notified before***	***solution which makes use of resources economically***	***environmental warnings like deforestation and proposed systems with both advantages.***		
5.	**Towards a Model-driven Performance Prediction Approach for IoT architectures**	Johannes K. et al.	2017	*Open Journal of Internet of Things (OJIOT)*	**Performance of IoT**	***Performance measurement of IoT architecture before development***	***Performance neglected during development of IoT resulting to supplemental efforts, costs, ..***	***Propose a model-driven approach to predict and evaluate the performance of IoT architecture in its early lifecycle***	***Model-driven approach***	5

STEP 3: Iterate N times

1. ONCE you grade them by their scores start reading the first two papers fully to arrive at deeper insights.

2. Then proceed to the references section of Paper1 (the highest score paper), pick 5 relevant papers

3. Repeat **Step 2**

4. There is no fixed number of iterations to stop at, the guideline is to stop at some point when you feel equipped and satisfied to defend.

5. Also note this is one process which you may need to repeat at equal intervals till your final reserach defend, so that you donot leave any stone unturned.

6. Usually 100 to 150 papers are referenced for Doctoral research, 70 to 100 papers for post grad research, 50 to 70 papers for under grad research. This is not a norm but a guide.

Note: This step of literature review to be done with discussion/support/mentoring by your Guide for better confining and understanding.

Research: "Re" -" Searching" is repeated searching till you mine out the hidden and unexplored information. This needs enormous focus, patience and interconnection skills, in my view point.

GOOD LUCK!!! Let you get what you search through research.