

CS591A1 : Data Systems Architectures, a Template

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ABSTRACT

Abstract here!

1 INTRODUCTION

1.1 Motivation

Every paper always comes with a motivation. Explain why this research is of interest to the community.

1.2 Problem Statement

You **must** define your problem statement. This can be boiled down to a question you are answering or concept you are exploring. You don't need to go into the nitty gritty details of your problem like variable definitions, but this is a bit higher level.

1.3 Contributions

Give your reader a small summary of what exactly you

You been reviewing a lot of papers this semester, take a look at what separated the good ones from the great ones and analyze what how they introduced their problem.

2 BACKGROUND

Recommended work belong here! Would highly suggest you add any time of relevant background information pertaining to your project (e.g. previous research)

If you need to explain with equations, 1 is an example of false positive rate of a Bloom filter [1].

$$f_p = \left(1 - \left(1 - \frac{1}{m}\right)^{kn}\right)^k \approx \left(1 - e^{-kn/m}\right)^k \quad (1)$$

3 ARCHITECTURE

This is where your papers will differ depending on what type of project you have. At this point everything is extremely flexible and depends on how you want to structure your paper.

3.1 TemplateDB

An example is the LSM project, generally you would want to start explaining your system architecture here. Additional features may also belong here. If you're benchmarking RocksDB you may end up explaining some of the experimental set ups (assuming you've defined the problem at hand!)

3.2 Solution Design

Maybe you're doing a research project that tackles on a particular problem. You may want to start introducing a design solution here that explains how you will tackle said problem.

3.3 Benchmark Explanations

If you're doing some sort of quantitative analysis you may want your math to start being defined and analyzed here.

4 RESULTS

Graphs are basically a requirement here!

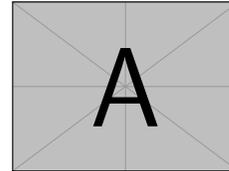


Figure 1: Example figure here

Table 1: An example table

	Col A	Col B
Row A	val 1	val a
Row B	val 2	val b
Row C	val 3	val c

You can also reference your old figures (Figure 1) and tables (Table 1)

5 CONCLUSION

Final thoughts here.

REFERENCES

- [1] Burton H. Bloom. 1970. Space/Time Trade-offs in Hash Coding with Allowable Errors. *Commun. ACM* 13, 7 (1970), 422–426. <http://dl.acm.org/citation.cfm?id=362686.362692>