# Survey Paper Title

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#### Abstract

The abstract should be around 150 words. It is supposed to serve as a short summary of the paper. Describe the paper topic and give a brief elevator pitch summary of the topic.

An abstract for this template: this is a template that you can use to typeset your paper. The template provides suggested outline to the project, along with useful LATEX tips. The structure and headings provided are just suggestions—feel free to modify as appropriate. You can find the source of this template at https://www.overleaf.com/read/bjxkpszmhphs#8c1717.

#### 1 Introduction

An introduction to your project paper is very much like an introduction to a book chapter or a research paper: it starts with the high-level history or background for the topic, says what the work was about and what the main results or takeaways are. This is where you tie the topic to what you learned in CSCI 361.

**Organize using paragraphs and boldface** It is a good practice to organize and structure your write up using paragraphs and boldface.

As you describe your work, you may wish to cite sections of the paper. In LaTeX, you can cite specific sections using \label and \ref. For example, I can cite the background section, refer to Section 2. Sometimes, you may have a minor remark that is best presented as a footnote, which you can do using the \footnote command, for example.

## 2 Background and Related Work

This is just a suggested section, where you present the background work you did on your project topic. This background work may have involved reading and understanding a paper or two, in which case you summarize that work here. Remember that you don't need to summarize everything—that the pieces that are relevant to the project.

If your background work involved looking at several different papers, you want to summarize the landscape of the of all the literature here. Remember to cite the work appropriately!

You can cite papers or book chapter by adding a bibliography and the cite command, e.g., [2] and [1]. Use Google scholar to find the Bibtex source of the particular resource you are using.

<sup>&</sup>lt;sup>1</sup>This is a footnote.

### 3 Background

This is a suggested section where you describe any definitions or notations used to understand the topic.

**Presentation.** If appropriate, you may want to include any figures. You may want to highlight observations or theorems using a **theorem**-style environment. See an example below.

**Theorem 1** ([1]) This is a theorem from Levin et al. [1].

Similarly, you may choose to use \lemma, \example, \conjecture or \property theorem-style environments defined for you, or create your own such environment.

**Example 1** For example, you may elaborate on papers you read by providing examples, or counter examples that you created.

**Typesetting math.** Hopefully by now you have had plenty of practice typesetting math in LATEX, but here are some examples just to remind you.

• Using superscript:  $f^m$ 

• Using subscript:  $x_1$ 

• Differential  $\frac{du}{dx}$ 

• Integral:  $\int_a^b f(x) dx$ .

• Summation:  $\sum_{k=1}^{n} k^2 = \frac{1}{2}n(n+1)$ 

• Greek letters:  $\Delta\Psi\Phi$ , and  $\delta\psi\phi\omega\pi\sigma\mu$ .

You should typeset long equations using  $\[\]$  as follows:

$$2^m \geq \binom{u\epsilon_0}{\Omega(n\epsilon_0')} \bigg/ \binom{n}{\Omega(n\epsilon_0')} \binom{O(n^2)}{\Omega(n\epsilon_0')} \; .$$

#### 4 Conclusion

Conclude your paper by summarizing the main takeaways and reflections.

## 5 Acknowledgement

Always remember to give credit where credit is due. No need to cite research papers here which you have already credited in your project. This is for acknowledging other useful resources or sources of support. If a fellow student or resource on the web helped you, this is where you thank them.

For example, parts of this template have been adapted from CS 224N at Stanford.<sup>2</sup>

 $<sup>^2\</sup>mathrm{Link}$ : http://web.stanford.edu/class/cs224n/project/project-report-instructions.pdf.

## References

- [1] Dave Levin, Katrina LaCurts, Neil Spring, and Bobby Bhattacharjee. Bittorrent is an auction: analyzing and improving bittorrent's incentives. In *Proceedings of the ACM SIGCOMM 2008 conference on Data communication*, pages 243–254, 2008.
- [2] Michael Piatek, Tomas Isdal, Thomas Anderson, Arvind Krishnamurthy, and Arun Venkataramani. Do incentives build robustness in bittorrent. In *Proc. of NSDI*, volume 7, 2007.