

# A Nice Descriptive Title without Abbreviations

F. Last  
University, City, Country,  
Department

T. Do  
University, City, Country,  
Department of XXX

**Abstract**—((remark: area)) ((todo: one sentence about the research area (which broad area are we considering?))) ((remark: issue)) ((todo: one sentence about the issue (what issue is getting to get solved?))) ((remark: related work)) ((todo: one sentence about the shortcomings of existing solutions.)) ((remark: assumptions)) ((todo: In this paper, we assume ...)) ((remark: approach)) ((todo: one sentence about the own approach)) ((remark: validation)) ((todo: one sentence about the validation of the results)) ((remark: result)) ((todo: one sentence about the main contribution and an outlook)) ((todo: about 150 characters))  
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**Index Terms**—some, keywords

## I. INTRODUCTION

((todo: One paragraph: What is the problem? What is problem area. Open up the subject.)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

((todo: One paragraph: Why is it interesting and important? Why is it hard? (e.g., why do naive approaches fail?) Narrow down: what is problem you specifically consider? Describe the problem addressed in this paper.)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum

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((todo: One paragraph: Survey past work relevant to this paper. Why hasn't it been solved before (related work)? Or, what's wrong with previous proposed solutions? How does mine differ?)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

In this paper, we assume ... ((todo: One paragraph: what are the assumptions)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

((todo: one paragraph: what is the own approach)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh

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gap 1

We have validated our approach by... ((todo: How have we validated our results?)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

gap 2

The main contribution of this paper is... ((todo: What are the key components of my approach and results? Also include any specific limitations. It's the most crucial paragraph, tell your elevator pitch: How is it different/better/relates to other work? Help the reviewer to get the scientific surplus value between all the motivation and basics.)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

gap 3

The remainder of the paper is structured as follows. We give a brief overview of related work in the context of ((todo: CHANGEME)) in Sec. II. In the subsequent Sec. III the ((todo: CHANGEME)) system is presented. The evaluation results obtained from ((todo: CHANGEME)) is discussed in Sec. IV. Finally, we close giving some conclusions and considerations and describe future work in Sec. V.

## II. RELATED WORK

In order to place the contribution of the paper in context and identify the gap the work is intended to fill, we provide a short literature survey. ((todo: This survey focuses on Wide Area Terminal Experimentation and Research<sup>1</sup> (WATER) [3] and Greedy Computing<sup>2</sup> [2]...)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante.

intro

((todo: related work 1)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

validation

((todo: related work 2)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

contributions

((todo: related work 3)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

structure

<sup>1</sup><http://ict-water.eu>

<sup>2</sup><http://swoogle.umbc.edu>

Tab. I: Example table.

Name	Age
Hans	80
Heinrich	77
Herbert	84

issue ((todo: outstanding problem)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

### III. MAIN PART

See Listing 1 and Table I.

Listing 1: Example Code

```

1 class HelloWorld {
2     private final static
3         String MESSAGE="Hello_World!";
4     public static void main(
5         String[] args) {
6         System.out.println(MESSAGE);
7     }
8 }
```

$$\begin{aligned}
 t_{fw}^{pd}(d) &= \max_d(t_{child_i}) \\
 t_{db}^{pd}(d) &= \sum_{i=1}^d t_{db_i} \\
 t_{pc}^{pd}(n, d) &= \begin{cases} t_{pc}(d) + c(n) & \text{if } d = 1, \\ t_{pc}(d) + c(n) + \max(t_{avail}(d)) & \text{if } d > 1. \end{cases}
 \end{aligned} \tag{1}$$

### IV. EVALUATION

Evaluation: How does it really work in practice? Provide real or simulated performance metrics, end-user studies, mention external technology adopters, if any, and so on.

This section presents the detailed results you have obtained. If the paper is theoretical, you might want to show curves obtained from your equations. If the paper is experimental, you will be presenting curves showing the measurement results. In order to choose the proper curves to present, you must first be clear what point you are trying to convey to the reader. The curves can then be chosen to illustrate this point. Whether your paper is theoretical or experimental, you must provide a careful interpretation of what your results mean and why they behave as they do.

See Figure 1 and Figure 2a.

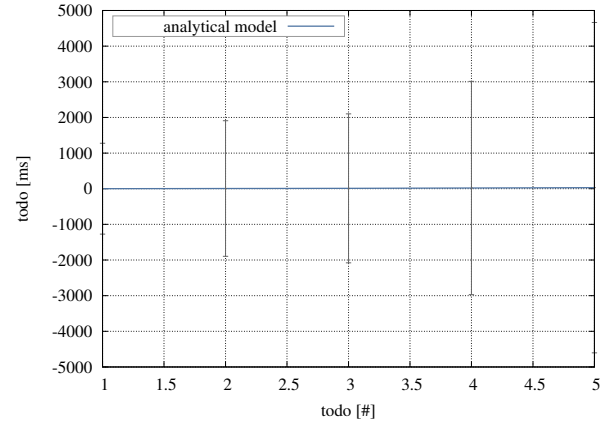


Fig. 1: Example image.

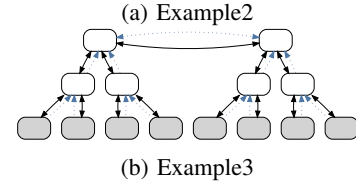
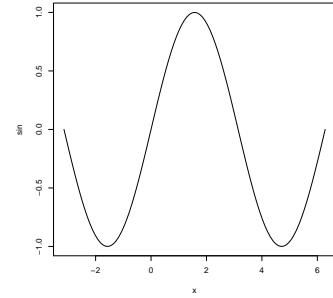


Fig. 2: Example images.

### V. CONCLUSION AND FUTURE WORK

results ((todo: We have shown that...)) Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. . ((todo: The crucial results are...)) Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

((todo: The presented work provides potential benefits for...)) Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco

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((todo: Our short-term goal is to...)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. ((todo: In medium term, we ...)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. ((todo: The long-term goals include...)) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante.

out-look

## VI. ACKNOWLEDGMENTS

Research for this paper was partially financed by the XXX project XXX[1]. We thank our project partners for their contributions and their collaboration to this research work.

## REFERENCES

- [1] M.R. Crispin. *Telnet randomly-lose option*. RFC 748. Internet Engineering Task Force, Apr. 1978.
- [2] Ian Foster and Carl Kesselman. *The Grid 2: Blueprint for a New Computing Infrastructure*. 2nd. Morgan Kaufmann, 2003, p. 748.
- [3] Anastasius Gavras et al. “Future Internet Research and Experimentation: The FIRE Initiative”. In: *ACM SIG-COMM Computer Communication Review* 37.3 (2007), pp. 89–92.