

Contribution Title*

First Author¹[0000–1111–2222–3333], Second Author^{2,3}[1111–2222–3333–4444], and
Third Author³[2222–3333–4444–5555]

¹ Princeton University, Princeton NJ 08544, USA

² Springer Heidelberg, Tiergartenstr. 17, 69121 Heidelberg, Germany
`lncs@springer.com`

<http://www.springer.com/gp/computer-science/lncs>

³ ABC Institute, Rupert-Karls-University Heidelberg, Heidelberg, Germany
`{abc,lncs}@uni-heidelberg.de`

Abstract. The abstract should briefly summarize the contents of the paper in 150–250 words.

Keywords: First keyword · Second keyword · Another keyword.

* Supported by organization x.

1 Introduction

1.1 Motivations

1.2 Contributions

2 Railway Signalling

2.1 Components of Signalling

2.2 Interlockings

2.3 Ladder Logic Programs

3 Formal Verification

3.1 Propositional Formulation

3.2 Model Checking

4 Reinforcement Learning

4.1 MDPs

4.2 Deep Q-Learning

4.3 Reward/Goal Shaping

5 Implementation

5.1 LL program generator

6 Experiments

6.1 Extended state-spaces

6.2 Interlocking examples

Please note that the first paragraph of a section or subsection is not indented. The first paragraph that follows a table, figure, equation etc. does not need an indent, either.

Subsequent paragraphs, however, are indented.

Sample Heading (Third Level) Only two levels of headings should be numbered. Lower level headings remain unnumbered; they are formatted as run-in headings.

Table 1. Table captions should be placed above the tables.

Heading level	Example	Font size and style
Title (centered)	Lecture Notes	14 point, bold
1st-level heading	1 Introduction	12 point, bold
2nd-level heading	2.1 Printing Area	10 point, bold
3rd-level heading	Run-in Heading in Bold. Text follows	10 point, bold
4th-level heading	<i>Lowest Level Heading.</i> Text follows	10 point, italic

Sample Heading (Fourth Level) The contribution should contain no more than four levels of headings. Table 1 gives a summary of all heading levels. Displayed equations are centered and set on a separate line.

$$x + y = z \tag{1}$$

Please try to avoid rasterized images for line-art diagrams and schemas. Whenever possible, use vector graphics instead (see Fig. ??).

Theorem 1. *This is a sample theorem. The run-in heading is set in bold, while the following text appears in italics. Definitions, lemmas, propositions, and corollaries are styled the same way.*

Proof. Proofs, examples, and remarks have the initial word in italics, while the following text appears in normal font.

For citations of references, we prefer the use of square brackets and consecutive numbers. Citations using labels or the author/year convention are also acceptable. The following bibliography provides a sample reference list with entries for journal articles [1], an LNCS chapter [2], a book [3], proceedings without editors [4], and a homepage [5]. Multiple citations are grouped [1–3], [1, 3–5].

References

1. Author, F.: Article title. Journal **2**(5), 99–110 (2016)
2. Author, F., Author, S.: Title of a proceedings paper. In: Editor, F., Editor, S. (eds.) CONFERENCE 2016, LNCS, vol. 9999, pp. 1–13. Springer, Heidelberg (2016). <https://doi.org/10.1007/1234567890>
3. Author, F., Author, S., Author, T.: Book title. 2nd edn. Publisher, Location (1999)
4. Author, A.-B.: Contribution title. In: 9th International Proceedings on Proceedings, pp. 1–2. Publisher, Location (2010)
5. LNCS Homepage, <http://www.springer.com/lncs>. Last accessed 4 Oct 2017