

Autonomous Driving: Using a CNN and some Imitation Learning to Drive a Car

Ron Domingo
Department of Electrical Engineering
Stanford University
Email: rdomingo@stanford.edu

Abstract—The abstract goes here.

I. INTRODUCTION

Path planning is a complex yet essential aspect of autonomous driving that is required for vehicles to traverse the world around us. Finding paths is a complicated task that involves the avoidance of both static and dynamic obstacles, all while ensuring that the the vehicle stays within the drivable area of the road.

II. SECTION

Section text here.

A. Subsection Heading Here

Subsection text here.

1) Subsubsection Heading Here: Subsubsection text here.

III. RSS CITATIONS

Please make sure to include `natbib.sty` and to use the `plainnat.bst` bibliography style. `natbib` provides additional citation commands, most usefully `\citet`. For example, rather than the awkward construction

```
\cite{kalmán1960new} demonstrated...
```

rendered as “[1] demonstrated...,” or the inconvenient

```
Kalman \cite{kalmán1960new}
demonstrated...
```

rendered as “Kalman [1] demonstrated...”, one can write

```
\citet{kalmán1960new} demonstrated...
```

which renders as “Kalman [1] demonstrated...” and is both easy to write and much easier to read.

A. RSS Hyperlinks

This year, we would like to use the ability of PDF viewers to interpret hyperlinks, specifically to allow each reference in the bibliography to be a link to an online version of the reference. As an example, if you were to cite “Passive Dynamic Walking” [2], the entry in the bibtex would read:

```
@article{McGeer01041990,
  author = {McGeer, Tad},
  title = {\href{http://ijr.sagepub.com/content/9/2/62.abstract}{Passive Dynamic Walking}},
  volume = {9},
  number = {2},
  pages = {62-82},
```

```
  year = {1990},
  doi = {10.1177/0278364990000900206},
  URL = {http://ijr.sagepub.com/content/9/2/62.abstract},
  eprint = {http://ijr.sagepub.com/content/9/2/62.full.pdf},
  journal = {The International Journal of Robotics Research}
}
```

and the entry in the compiled PDF would look like:

- [1] Tad McGeer. Passive Dynamic Walking. *The International Journal of Robotics Research*, 9(2):62–82, 1990.

where the title of the article is a link that takes you to the article on IJRR’s website.

Linking cited articles will not always be possible, especially for older articles. There are also often several versions of papers online: authors are free to decide what to use as the link destination yet we strongly encourage to link to archival or publisher sites (such as IEEE Xplore or Sage Journals). We encourage all authors to use this feature to the extent possible.

IV. CONCLUSION

The conclusion goes here.

ACKNOWLEDGMENTS

REFERENCES

- [1] R.E. Kalman. A new approach to linear filtering and prediction problems. *Journal of Basic Engineering*, 82(1):35–45, 1960.
- [2] Tad McGeer. Passive Dynamic Walking. *The International Journal of Robotics Research*, 9(2):62–82, 1990. doi: 10.1177/0278364990000900206. URL <http://ijr.sagepub.com/content/9/2/62.abstract>.