# Stereo cameras with applications to traffic scenarios, traffic lights detection

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Abstract—A traffic light recognition system is a very important building block in an advanced driving assistance system and an autonomous vehicle system.

## I. INTRODUCTION

A stereo camera is a type of camera with two or more image sensors. This allows the camera to simulate human binocular vision and therefore gives it the ability to perceive depth.

#### II. ABOUT

A. What is about?

TODO

Lorem Ipsum

B. Something

**TODO** 

Sapana navaga

## III. CONCLUSIONS

TADAM! THE END

#### REFERENCES

- [1] Andreas Fregin, Julian Müller, Klaus Dietmayer. Three Ways of using Stereo Vision for Traffic Light Recognition https://www.researchgate.net/publication/318810474 date accessed: 07.05.2021
- [2] Andreas Fregin, Julian Müller, Klaus Dietmayer. Multi-camera system for traffic light detection: About camera setup and mapping of detections https://www.researchgate.net/publication/ 323792381 date accessed: 12.05.2021
- [3] Hiroki Moizumi, Yoshihiro Sugaya, Masako Omachi, Shinichiro Omachi. Traffic Light Detection Considering Color Saturation Using In-Vehicle Stereo Camera https://doi.org/10.2197/ipsjjip.24.349 date accessed: 17.05.2021
- [4] Tobias Langner, Daniel Seifert, Bennet Fischer, Daniel Goehring, Tinosch Ganjineh. Traffic Awareness Driver Assistance based on Stereovision, Eye-tracking, and Head-Up Display https: //www.drgoehring.de/bib/langner16icra-sst/ langner16icra-sst.pdf date accessed: 19.05.2021
- [5] Nathaniel Fairfield, Chris Urmson. Traffic Light Mapping and Detection. https://static.googleusercontent.com/ media/research.google.com/de//pubs/archive/ 37259.pdf date accessed: 22.05.2021