



## Thesis: Life Cycle Analysis of Automotive Wiring Systems

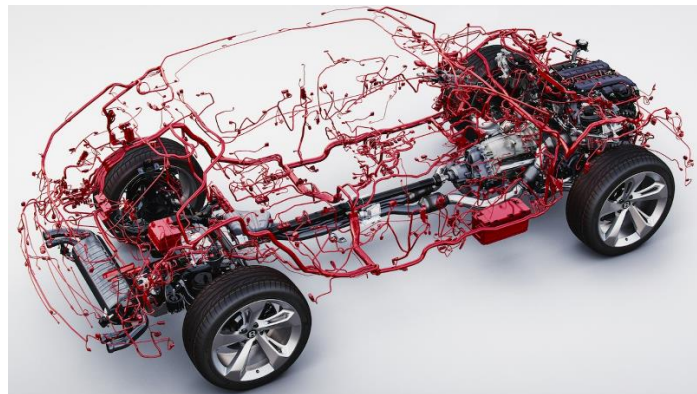
The thesis can be written in German or English.

**Anmerkung (Deutsch):** Diese Bachelorarbeit ist besonders geeignet für Studierende aus dem Bereich Umweltingenieurwesen, die Interesse an Elektromobilität haben.

**Note:** This bachelor thesis is especially suitable for students from the field of environmental engineering who are interested in electromobility.

### Introduction

The increasing awareness of the environmental impact of human activities has led to a growing interest in the life cycle assessment (LCA) of products. Automotive wiring systems are an essential component of modern cars, and their production, use, and disposal have a significant impact on the environment. The aim of this study is to conduct a comprehensive life cycle assessment of automotive wiring systems to understand their environmental impact, identify CO<sub>2</sub>-hotspots, and to propose and evaluate possible improvements and new ideas.



**Auto Wiring Harness** (source: <https://www.wirafe.com/global-auto-wiring-harness-market-outlook/>, 2018)

### Objectives

- Analysing the life cycle of modern automotive wiring systems to obtain a system understanding of the complex process.
- Identifying the environmental hotspots of the production of the wiring systems
- Proposals and evaluation of possible improvements of the wiring system with regard to the life cycle to reduce CO<sub>2</sub> emissions.

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