

Interactive Front-End for EV Traffic Simulation in Highways

Adrian Thiesen
Fakultät für Informatik
Technische Universität München
adrian.thiesen@tum.de

Martin Wauligmann
Fakultät für Informatik
Technische Universität München
wauligma@in.tum.de

ABSTRACT

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec pretium mollis leo id dignissim. Ut nec dictum metus. Curabitur at pulvinar dolor. In hac habitasse platea dictumst. Ut sed enim est. Maecenas non gravida orci. Vestibulum vitae hendrerit lacus. Vivamus in viverra sapien. Maecenas id nunc ut lacus aliquet dictum. Curabitur id nulla tellus. Nullam et euismod metus. Etiam consectetur lorem a tellus ultrices iaculis.

1. INTRODUCTION

As set in the OECD Environmental Outlook to 2050 [1], CO2 reduction will be a major target for the OECD nations in the near future. Even though electric vehicles [EV], could play a big factor in achieving that goal, their sales are strikingly low in Germany. Only 0.39% of new registration in germany were EV. [2] A major throwback with EV is there generally low range below 150km. To compensate that Victor del Razo and Hans-Arno Jacobsen, have outlined a method in their research paper Smart Charging Schedules for Highway Travel with Electric Vehicles, for scheduling charging stops during long distance travel e.g. 500km so that the final destination is reached with the lowest cost possible, in their case cost travel time [3]. But this project is missing some interface, that shows to the driver basic information of the process e.g. a map of his position and charging stations. Besides that another sort of interface is desired, for someone that manages the simulation [SMI]. Therefore this work will propose prototypes for two Front-Ends. One for the driver, a driver interface [DI] and one for the managing persona a simulation managing interface [SMI].

2. BACKGROUND AND SIGNIFICANCE

Our contribution for the project can be outlined with in the research questions stated as the follow.

1. How does a graphic interface for showing the progress of the simulation should look like?
2. What tools, paradigms, etc. should be used?
Hello my name is
3. What are the existing standards for integration to vehicle bus?
hello?

3. PRELIMINARY LITERATURE REVIEW

4. RESULTS OUTLOOK

5. TIMELINE

Objective	Schedule	Deadline
Phase 1: Prewriting	2 week	16.05.2020
First research and examination of literature sources	2 weeks	
Research context and background	1 week	
Create a 2-page preliminary statement	1 week	
Phase 2: Writing	a	a
a	a	a
a	a	a
a	a	a
Phase 3:	a	a
a	a	a
a	a	a