



# Design Through My Eyes: Supporting Designers with a Vision Impairment Simulator Using Eye-Tracking

## Open Bachelor/Master Thesis

### Background

According to the World Health Organization (WHO), visual impairment is a prevalent issue affecting approximately one-sixth of the global population. It is estimated that 39 million individuals are completely blind, necessitating assistance from others for daily activities. In recent years, autonomous driving technology has advanced significantly and become a reality. This technology is particularly advantageous for people who are blind or visually impaired, as it provides them with a measure of independence and freedom. To facilitate a deeper understanding of the abilities and needs of this demographic, the development of simulation software could prove beneficial.

### Research Goal

The aim of this thesis is to build a desktop overlay visual impairment simulation that can be used for virtually any designing task. A prototype shall be implemented and a usability study should be conducted.

Based on bachelor/master level the scope is adapted.

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