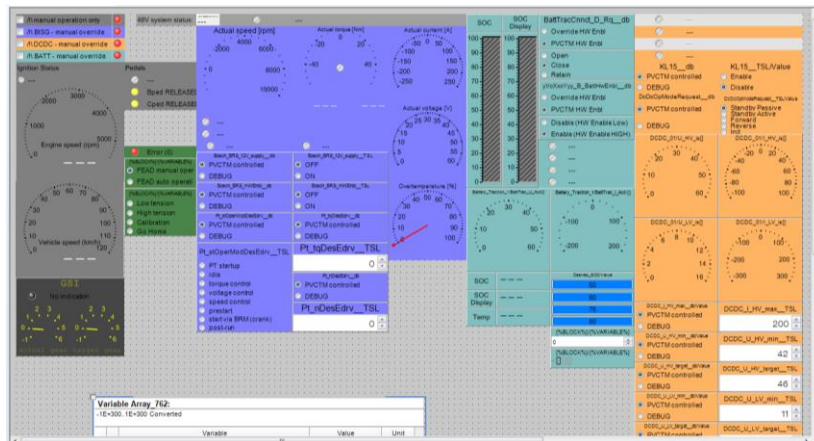


# Masterarbeit

## Development of a Prototype Vehicle Status Display and Interaction Device

### Problemstellung

During development, car manufacturers need to interact with prototypical vehicle features. Series vehicle HMI (instrument panel cluster, center console displays etc.) are not suitable for this purpose, because the new feature is not yet integrated, the desired detailed information is not shown, and the desired modification of feature parameters is not possible. Also, existing solutions have drawbacks like limited graphical capabilities, old-fashioned user interface (e.g., no touch screen), or cumbersome configuration capabilities.



EXAMPLE OF A SIMILAR GUI

### Aufgabenstellung

Together with our industry partner, you should develop a concept and a prototypic implementation for a modern, ANDROID-based Vehicle Status Display and Interaction Device. The main requirements are:

- ▶ Provide intuitive, easily customizable graphical user interface (see figure for an impression)
- ▶ Support vehicle connection via CAN
- ▶ Use COTS smartphone/tablet as front end device
- ▶ Later phase (optional): Other I/Os (e.g., analog) in addition to CAN

### Vorkenntnisse

- ▶ Programming experience in Java
- ▶ Some knowledge of Android
- ▶ Software engineering basics

### Ansprechpartner

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