

## Dissecting AlterEgo - New Ways of Trust Assessment

### Abstract:

The AlterEgo is envisioned as a trustworthy digital representative of its user. It enforces the interests of the user with regard to trustworthiness assessment and privacy protection against other parties in the network. The areas in which the AlterEgo is to be used encompass any kind of (digital) functionalities and services that the user consumes. However, current devices suitable to embody our AlterEgo, e.g., our smartphones, smartwatches, tablets, and smart glasses, are themselves a collection of a plethora of hardware and software, each controlled by vendors pursuing their own agenda, often not in line with the interests of the user. Taking one step back, with this work, we tried to systematically identify those influences from inside our homes and devices on our AlterEgo and assess their impact on our trustworthiness assessment and privacy protection. As a result, a systematic approach to dissect the defining aspects of insiders is proposed, which includes specific allocatable characteristics and which are related with each other to form a new and simple insider taxonomy.

These new foundations allow the comparison of different research in this direction in a structured manner. Furthermore, the new approach facilitates the identification of specific threat features on our AlterEgo in future work.