

iPanopticon - Privacy Risks in the Apple Ecosystem and Ways to Protect Yourself

Abstract:

As of early 2024, more than 2.2 billion Apple devices are globally active. They permeate all aspects of daily life and collect, process, store, and transmit a vast set of sensitive personal data. Apple advertises its ecosystem as particularly secure and privacy-friendly. However, due to the black-box nature of Apple systems, it is mostly impossible to validate these claims independently.

With my team, we thoroughly investigated selected parts of the Apple ICT-ecosystem. Our goal was to gain a deep understanding of the inner workings of these black-box systems, thus allowing us analyzing and improving their security and privacy. To this end, developing own prototypes and research software was paramount to success. In this talk, I will spotlight selected results, which helped improving security and privacy for end users.