Evaluation and Discussion

Evaluation

Discussion

Mobile Crowdsensing

Mobile crowdsensing (MCS) is a "sensing paradigm that empowers ordinary citizens to contribute data sensed or generated from their mobile devices" that is aggregated "in the cloud for crowd intelligence extraction and human-centric service delivery" Guo2015. Over the past decade, substantial research has been conducted on defining and classifying MCS applications [and references therein]Capponi2019, Guo2015. While not discussed in previous work Ayday2020, Ayday2021, ShareTrace is a MCS application. The following characterization of ShareTrace assumes the four-layered architecture of a MCS application Capponi2019, which offers a comprehensive set of classification criteria that To offer a clear comparison, tab:classification follows the same structure as Capponi2019. Some aspects of the architecture, namely sampling frequency and sensor activity, are marked according to how ShareTrace is described in previous work, rather than how it would function to optimize for energy efficiency. More detail is provided below in this regard. When classifying ShareTrace as an MCS application, the following description is helpful: quote ShareTrace is a decentralized, delay-tolerant contact-tracing application that estimates infection risk from proximal user interactions and user symptoms.