



Abschlussvortrag Research Track Robert Werner

„HitchhikeBox: A decentral, verifiable, and privacy-protecting automated logistic transport concept for pharmaceuticals“

Currently, the distribution of ad hoc single-purpose delivery trips of pharmaceuticals from pharmacies to their clients is inefficient and high on emissions. The HitchhikeBox concept enables their users to send reliably monitored parcels via already existing transportation channels. This eliminates the need for single-purpose delivery trips and thus saves on cost and emissions. The system is open for competing service providers with contract settlement as well as payment and sanctioning of the participating actors being fully automated. In addition, contracts, payments, and sensor data are verifiable only to the relevant participating parties via asymmetric encryption and zero-knowledge proofs to guarantee the users' privacy and ensure non-traceability of deliveries. The system is designed to be resilient, self-governing, and suitable for highly sensitive goods like medication transport by assuring its optimal condition. Further, the system is utilizing smart contracts for contract conclusion and enforcement as well as a distributed off-chain cluster to process and store data in a General Data Protection Regulation (GDPR) compliant way.

Betreuer der Arbeit: Prof. Dr. Andreas Rausch, Prof. Dr. Benjamin Leiding

Datum: Freitag, 08. September 2023, 14:30 Uhr

Ort: Online-Meeting über BBB

Link: <https://webconf.tu-clausthal.de/b/sim-uc9-rvy>