CA: B1 Topic: Spatio-temporal Data Acquisition & Analysis, Monitoring Devices and User Communication
Code: MS-E1: Implementation and extension of a model for real-time automatic matching of complementary transport needs

In this line of research, we develop methods and models to facilitate automated assessment of outcomes of people working together. This is of importance whenever someone states a need which can be fulfilled by collaborating with other persons or entities having complementary needs (such as buying / selling things, getting from one location to another, etc.). Since most such needs are embedded in the “real world”, we restrict our works to needs having a spatio-temporal component. Further, due to the fact that a lot of our research concerns topics from the transportation and mobility domain, we mainly consider transport needs in a first stage. We look at ways to formalize and specify them in a ubiquitous manner and propose a model for publishing and processing such complementary needs. For a prototypical implementation, we model needs as Linked Data, enable matching complementary needs by simulating common satisfaction processes and assess outcomes using a variety of similarity measures. The submission currently being prepared involves a description of this prototype, and the underlying model which contributes to building systems that simplify and generalize the search for spatio-temporal information.