Smartphone-based Traffic Information System

System Components and the Demonstrator

Vehicle/Mobile Positioning and Tracking

Urban Traffic Estimation using Mobile Probes

The System Demonstrator

- A mobile client that periodically sends A-GPS location updates to the main server via UMTS
- The real-time urban traffic emulation that generates a large amount of simulated A-GPS mobile clients
- The traffic server implementing a secure authentication protocol to preserve communication security and users’ privacy
- The server logic including road network generation, map-matching and traffic state estimation
- A basic user interface implemented on Android devices that presents traffic information to subscribers using the Google Maps API

Secure and Privacy Aware Communications

Contact Information

Vasileios Manolopoulos
Sha Tao
Ana Rusu

KTH School of ICT
(Information and Communication Technology)

Electrum229,
Isafjordsgatan 22,
164 40 Kista,
Stockholm, Sweden

Email:
{vama, stao, arusu}@kth.se