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Titel des Beitrags: Smartphone Sensor Platform to Study Traffic Conditions and Assess Driving Performance

Abstract: Sensor technology available in smartphones enables the monitoring of mobility patterns, which could be of particular interest for the transportation sector. For example, driving time information can help to determine if a selected path is the most convenient. Moreover, measurements related to the time expended on the road and origin destination matrices can lead to conclusions related to the organization of travel schedules and routes, enhancing reliability and resulting in a shorter total traveling time. Relying on GPS-based Floating Car Data (FCD), we designed a platform to acquire data for the evaluation of traffic conditions and driving performance using mobile phone sensors. Users control the activation of the tracking activity themselves and can benefit from information provided by other users’ records. Additional metrics related to the travel time and vehicle’s speeds contribute to the assessment of traffic management issues. Conclusions regarding possible applications of the tool are outlined.

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