

Graduiertenkolloquium Angewandte Informatik

Efficient Context-aware Real-time Processing of Personal Data Streams

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In this work I propose a framework for the development of innovative mobile applications that are context-aware in processing of real-time personal data streams by taking into account the resource limitation on mobile devices, in order to achieve an efficient processing of real-time sensor data on mobile devices for various use cases. I present an innovative event-driven hybrid software architecture for data-intensive mobile applications, in order to extend processing capability by using an additional backend server. Furthermore, I present context-aware monitoring models with the purpose of relating real-time personal data with personal context and domain knowledge. The approach of data collaboration enables collaborative personal data processing. I also discuss an approach for resource-aware dynamic pattern distribution to achieve a more efficient pattern distribution regarding available resources of mobile devices. The semantic-based dynamic pattern management uses semantic technologies to manage patterns and event resources and in order to achieve real-time adaptation to event resource changes.

Termin: Freitag, 06. Juni 2014, 14.00 Uhr

Ort: Englerstraße 11, 76131 Karlsruhe
Kollegiengebäude am Ehrenhof (Geb. 11.40), 2. OG, Raum 231
(Hinweise für Besucher: www.aifb.kit.edu/web/Kontakt)

Veranstalter: Institut AIFB, Forschungsgruppe Wissensmanagement
Zu diesem Vortrag lädt das Institut für Angewandte Informatik und Formale Beschreibungsverfahren alle Interessierten herzlich ein.

Andreas Oberweis, Hartmut Schmeck, Detlef Seese, Wolffried Stucky, Rudi Studer (Org.), Stefan Tai