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www.tk.jku.at

Gabriele Kotsis

Research Areas

Distributed & Mobile Computing

grid computing   agent-based computing

internet computing   mobile computing

wireless networks   mobile multimedia

sensor networks   mobile communication

ubiquitous web applications

TK

Media & Interaction

intelligent systems   cooperation

customization   coordination

personalization   non-standard HCI

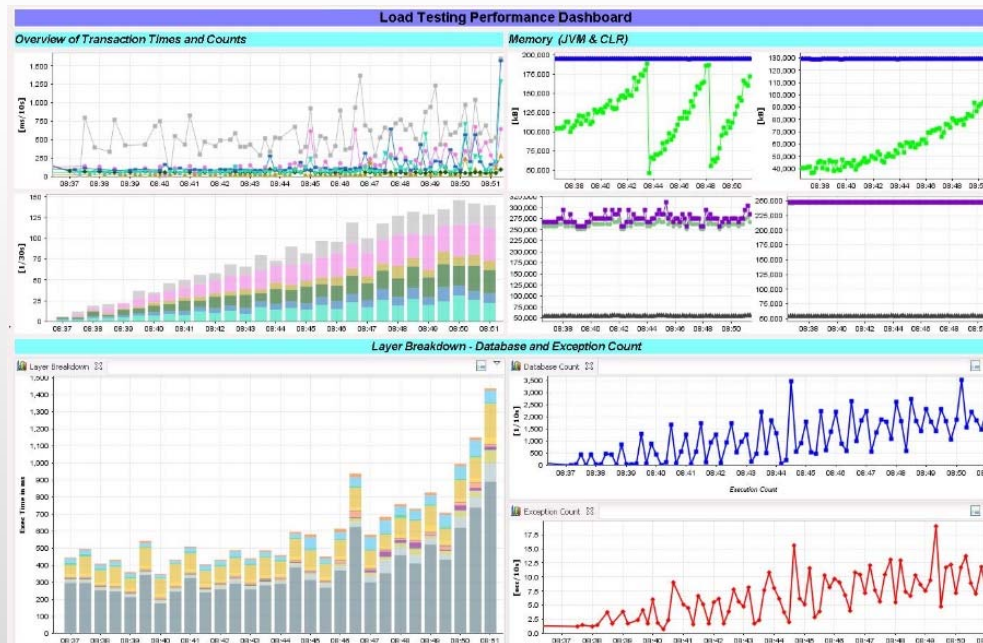multimedia   interaction

mobile information management

Model driven engineering   Performance evaluation

Conceptual modeling   Simulation

Semantic modeling   Usability

Modelling & Evaluation

JMU

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Performance Evaluation

■ Performance Load Testing

(Master Thesis, Bernd Greifeneder, 2004)

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Community Modelling

■ The Parliament Analyzer
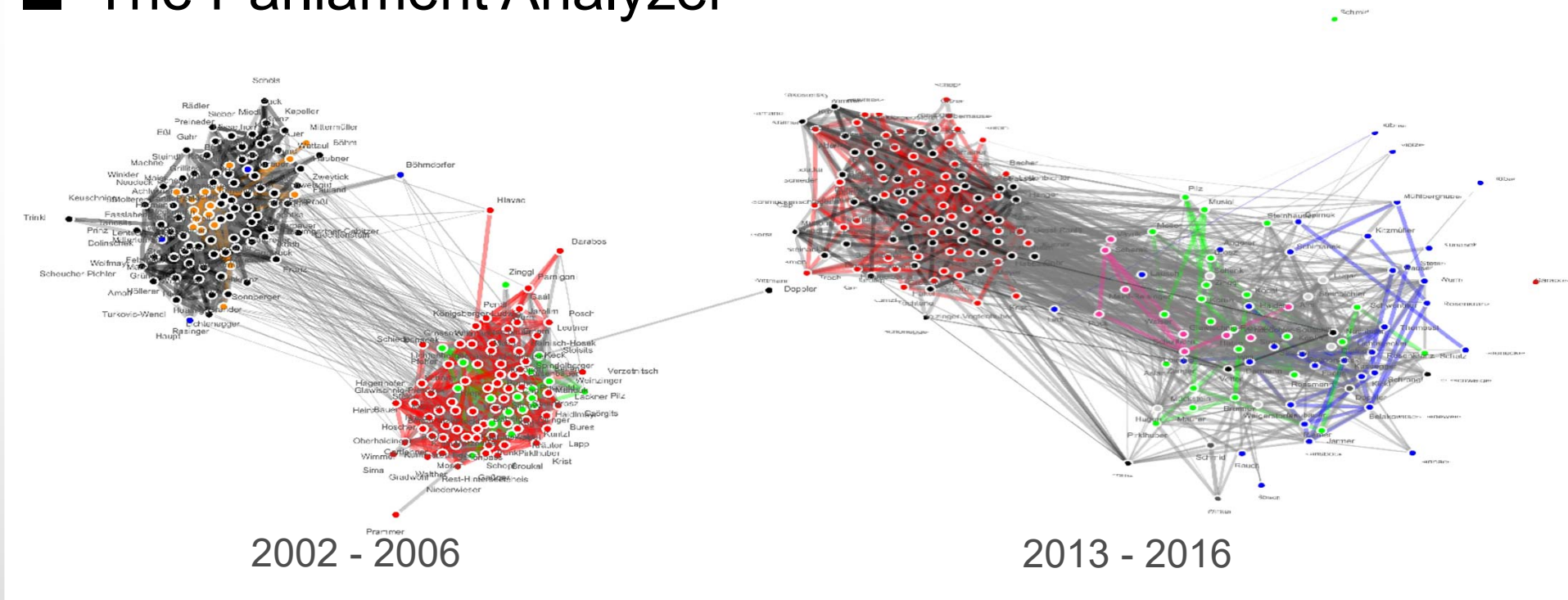
2002 - 2006

2013 - 2016

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Community Modelling

■ Evaluating Customer Satisfaction Using Behavioral Analytics of Data-Intensive Software Systems
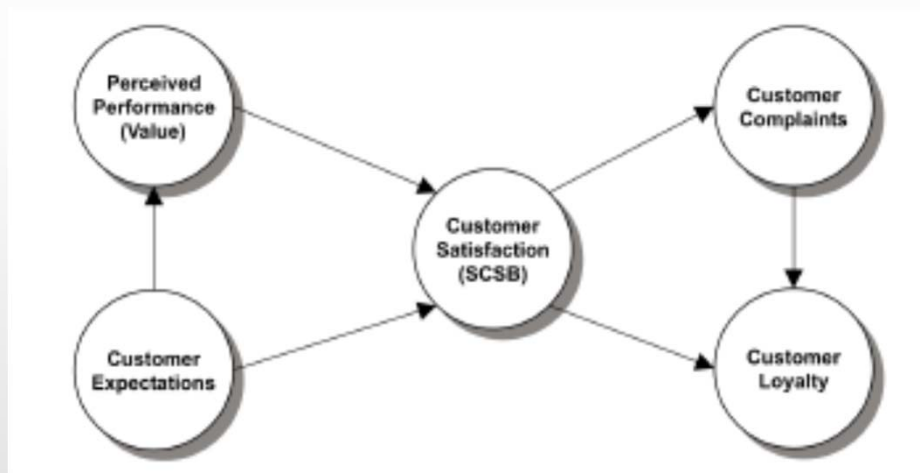

[Fornell 1992]

find the influential drivers
of customer satisfaction
- Hypothesis driven (statistical) tests confirmed a positive correlation among technical service quality and duration of service usage
- Data driven (machine learning) methods wer able to distinguish satisfied and dissatisfied customers at a precision of 70-80%

Gabriele Anderst-Kotsis, Jürgen Ratzenböck:
Evaluating Customer Satisfaction: Using Behavioral Analytics of Data-Intensive
Software Systems. iiWAS 2018

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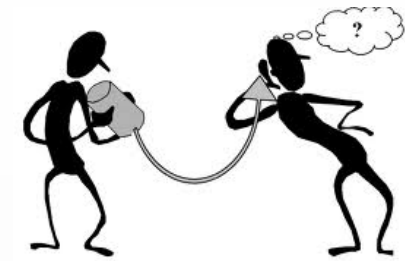
Mobile Computing

■ Energy Consumption of Mobile Devices
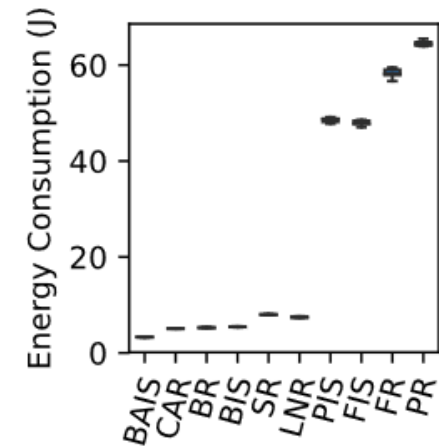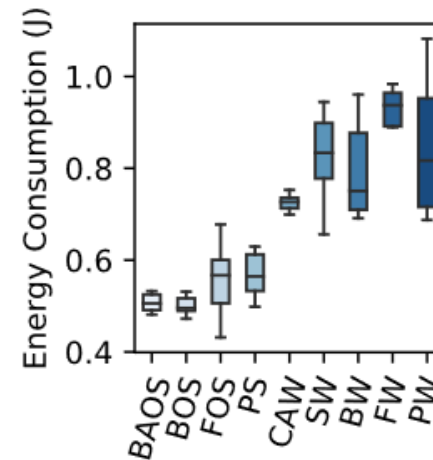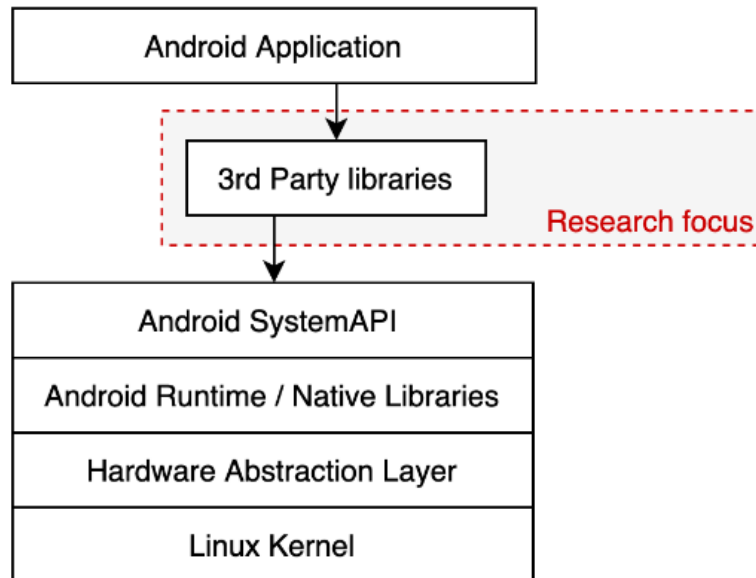
Energy consumption for an Android I/O library: write (left) and read (right) methods

Andreas Schuler, Gabriele Anderst-Kotsis: Characterizing Energy Consumption of Third-Party API Libraries using API Utilization Profiles. ESEM 2020: 8:1-8:11

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Thesis Topics

- **Design research** on artefacts for communication, collaboration, and coordination

- **Feasibility studies** on mobile technologies in application domains including Arts, Medicine, or Education

- **Prototypical development and evaluation** of humans and robots (drones) teaming scenarios

- **Performance evaluation** studies of distributed and mobile systems, Web-Architectures, ad-hoc networks, …

- …