

FREIE UNIVERSITÄT BERLIN Fachbereich Mathematik und Informatik

Promotionsbüro, Arnimallee 14, 14195 Berlin

DISPUTATION

Montag, 23. November 2015, 12.00 Uhr

Ort: Raum 049, Takustr. 9, 14195 Berlin

Disputation über die Doktorarbeit von

Herrn Huaming Wu

Thema der Dissertation:

Analysis of Offloading Decision Making in Mobile Cloud Computing

Thema der Disputation:

Decisions in Mobile Offloading

Die Arbeit wurde unter der Betreuung von **Prof. Dr. K. Wolter** durchgeführt.

Abstract: Mobile cloud offloading migrates computation-intensive parts of applications from resource-constrained mobile devices onto resource-rich cloud servers. It can under certain conditions be an effective way to shorten response time and extend battery life of mobile devices.

In this talk I will show how effective and efficient offloading can be and what factors influence its performance. We will discuss the right time to offload (when to offload), the right application component to offload (what to offload), the right place to offload (where to offload), and the right way to offload (how to offload). I will introduce how to optimally partition an application into local and remote parts such that the mobile device obtains the most benefit. Especially, I will talk about how queuing models and Lyapunov optimization are used to explore the energy-delay tradeoffs for different types of applications (e.g. delay-tolerant and delay-sensitive applications) based on energy consumption and response time combined metrics.

Die Disputation besteht aus dem o. g. Vortrag, danach der Vorstellung der Dissertation einschließlich jeweils anschließenden Aussprachen.

Interessierte werden hiermit herzlich eingeladen

Die Vorsitzende der Promotionskommission

Prof. Dr. K. Wolter