

Research Statement

Revised on Mar 2012

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Introduction

I am currently into my second year Ph.D candidate with the school of Information Systems, Singapore Management University. My research interest is in mobile and ubiquitous computing, which began when I was introduced to the field in my previous work after my undergraduate studies by my final-year project supervisor with the school of EEE. It has spurred my interest to take up my masters (MSc in Information Systems) under Wee Kim Wee School of Communication and Information instead with the School of EEE. This led me to pursue this topic with SMU.

Past Work/Projects

In my previous work, I was involved in the project “Integrated Content-and-Context Aware Media Retrieval Systems for Mobile Media Applications” under the AStar Mobile Media Thematic Strategic Research Program. This work not only exposes me to the field of software and system integration of algorithms with the mobile platform, in addition, I was introduced to field of information systems in areas such as architecture, human-computer interaction, data mining and information retrieval. Although I am not directly involved in the research and development of the signal processing algorithms, I am responsible in system building for both the backend and frontend prototype.

In my Masters course work, my course mates and I reviewed the GWAP (Games with a purpose) systems that involves in using gaming as a mean to annotate images. In which we did a review existing techniques and we not only developed a alternative GWAP system that implements a single user interface that works with a low users base, we also did a user review on the interface as well as the tag quality of the annotated images.

Current and Future Research Interest

Extending from my work in system building for the research project, the work nevertheless introduces me to mobile system development that involves in address the limitations of the mobile platform in computation, power and latency. This constraint thus molded my direction in pursuing into the area with SMU where I now focus my effort in the systems domain in research into areas where we can effectively address these areas.

The areas that I am interested in mobile systems are the addressing of the collection, usage and constraints to context- & context aware system. This would include looking into areas how we collect these information, the analysis of the information as well as addressing of the problems that user face when using such

systems in real life on their mobile devices (Smartphones/tablets/etc). The other area of my interest is the human-computer interaction of such mobile devices with the user under the content and context aware systems. In terms of how user interact and experiences on these devices.

As of now, I am currently into my second year of my PhD, where I am now formulating my research focus and domain with guidance from my research supervisor Assistant Professor Rajesh Krishna Balan. I welcome any comments or collaboration work with peers in this field.