<CS Research Seminar Series>

-towards building research collaborations-

"Trustworthy Autonomic Computing: Architecture and Validation"

Speaker: Dr Thaddeus Eze
Venue: University of Chester, Thornton – Room 245, B49
Date: Wednesday, 25th November 2015
Time: 12.30
Audience: Staff and students interested in research

Summary:

This research investigates the challenge of trustworthiness in autonomic computing (AC) and ways of achieving trustworthy autonomic systems through adequate run-time self-validation and conformance testing. Despite the progress in AC research, there are still significant challenges to achieving trustworthiness – a quality that gives confidence that an autonomic system (AS) will remain correct in the face of any possible contexts and environmental inputs. These include the lack of support for inbuilt mechanisms for trustworthiness in the design methods used for the technology, the limitations regarding the way ASs are validated, and the lack of self-monitoring support that is capable of achieving stability over longer term time frames. The current state of practice does not lend itself robustly enough to support trustworthiness and system dependability. For example, despite validating system's decisions (policies) within a logical boundary set for the system, there's the possibility of overall erratic behaviour or inconsistency in the system emerging, for example, at a different logical level or on a different time scale. Validation alone does not always guarantee trustworthiness as each individual decision could be correct (validated) but overall system may not be consistent and thus not dependable. This research looks at a more thorough and holistic approach, with a higher level of check, to convincingly address the dependability and trustworthy concerns.

Speaker's bio:

Thaddeus is a Lecturer in the Department of Computer Science, Faculty of Science and Engineering of the University of Chester, UK, since August 2015. He holds a PhD in Trustworthy Autonomic Computing, an MSc in Mobile Computing and Communications, a Diploma in Computer Networking and Management and a BSc in Computer Science.

He has previously been an Associate Lecturer at the University of Kent and a Researcher and Visiting Lecturer at the University of Greenwich. His research expertise is on Trustworthy Autonomics and MANET with current interest in Cybersecurity research.

Thaddeus is an active member of the IEEE and currently volunteering for the IEEE UKI Students Activities Committee.

Treat: Tea and coffee + cookies will be served

University of Chester