



Monday, August 25, 2014 (Full-day)

## TUTORIAL ANNOUNCEMENT

22nd IEEE International Requirements Engineering Conference  
(RE'14) – Karlskrona, Sweden – <http://www.re14.org>



Jane  
Cleland-Huang

### T03 – Driving Architectural Design in Agile Projects: A Persona-Centric Approach

In this tutorial we present practical and effective techniques for working with stakeholders to elicit, analyze, and document quality concerns and other architecturally significant requirements in agile projects. We introduce the practice of using light-weight architecturally-savvy personas (ASP) to emerge and analyze stakeholders' concerns and to drive and evaluate architectural designs. ASPs are borrowed from the domain of Human Centric Computing (HCI). We show how ASPs are used to discover quality concerns, balance trade-offs, drive architectural design, and help evaluate candidate architectures. Participants will engage in a hands-on activity, based on a HealthCare marketplace, which involves identifying architecturally significant user stories/requirements, creating relevant personas, and then using these personas to evaluate candidate architectural solutions. While we present our approach in the agile context, the use of ASPs is equally applicable to other kinds of fast-moving projects.

This tutorial is targeted towards project managers, business analysts, requirements engineers, developers, and others, who are interested in learning new techniques for managing architecturally-significant concerns in agile projects. No prior knowledge is required - but participants should be prepared for an engaging and interactive experience.

**Biography:** Dr. Jane Cleland-Huang is Professor of Software Engineering at DePaul University's School of Computing where she serves as the director of the Systems and Requirements Engineering Center. She has published broadly in the areas of Requirements Engineering and Software Traceability and is co-author of two books "Software by Numbers" and "Software and Systems Traceability." Dr. Cleland-Huang has extensive industrial experience working on projects as varied as transportation, healthcare, and case tool environments. She developed her insights and techniques for working with Architecturally-Savvy Personas through leading a US \$2 Million instrumentation project. She serves as steering committee chair for the Requirements Engineering conference, and as Associate Editor for IEEE Transactions on Software Engineering. She also serves on the Editorial boards of both IEEE Software and the Requirements Engineering Journal.

