ABSTRACT
Bernard of Chartres (via Sir Isaac Newton) reminded us that all progress is achieved “on the shoulders of giants” – that our greatest discoveries and innovations build upon the inspirations, triumphs, and foundational truths established by those who have gone before us. However, in our field of Software Engineering, as new ideas are transmitted at the speed of light, rather than the speed of Bernard’s horse, innovations are typically achieved as we, the ordinary people, exchange ideas, deliver incremental improvements, and offer the occasional truly novel idea to advance our field. In this fast-paced environment it is particularly important for us to take the time to build a strong foundation for our knowledge – keeping audit trails of our experiments, sharing our datasets, releasing the code we used to run our experiments, and generally making our work transparent and reproducible, so that we no longer depend on giants to further the field. Instead our successes are a collective effort from our community. Unfortunately, this degree of openness comes with its own challenges. In this talk, Dr. Cleland-Huang will explore some of the success stories in our field and discuss ways to deal with the psychological, philosophical, and practical barriers that impede open collaboration.

BIography
Dr. Jane Cleland-Huang is Professor of Software Engineering in the School of Computing at DePaul University, Chicago, where she serves as the director of the Systems and Requirements Engineering Center. She also serves as the North American Director of the International Center of Excellence for Software Traceability. Her research interests emphasize the application of machine learning and information retrieval methods to tackle large-scale Software Requirements problems. Dr. Cleland-Huang serves on the Editorial Board for the Requirements Engineering Journal, and as Associate Editor for IEEE Transactions on Software Engineering and IEEE Software. She has been the recipient of the US National Science Foundation Faculty Early Career Development Award, four ACM SIGSOFT Distinguished Paper Awards and 2006 IFIP TC2 Manfred Paul Award for Excellence in Software: Theory and Practice. She is a member of the IEEE Computer Society and the IEEE Women in Engineering. She received her PhD in Computer Science from the University of Illinois at Chicago.