Integrating Evolutionary Software Development in Software Engineering Course Projects

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Abstract

Evolutionary Software Development (ESD) has been widely used in industry. However, most of higher education institutions have not yet fully integrated it into the software engineering courses, especially the course projects. In this talk, we will briefly introduce the evolutionary software development, and then discuss its impact on software engineering education. Case studies with increment change and other practices as the core requirement for the course projects will be presented, and case study results will be discussed to illustrate their merits. The challenges and issues with integrating the ESD into software engineering course projects will also be explored.

Biography

Dr. Simon Xu is the director and a professor in the School of Computer Science and Technology at Algoma University, Canada. He is also a guest professor of Wuhan University and the adjunct professor of China University of Mining and Technology, China. Dr. Xu received his Ph.D. degrees from Wayne State University, USA and University of Liege, Belgium. His research interests include software evolution, program comprehension, big data, and cognitive process during software development. Dr. Xu has published more than 90 articles in referred journals and conference proceedings and a few authored/co-authored books. He has also chaired seven IEEE international conferences and has been invited to give talks by IEEE international conferences. He is a senior member of IEEE and a member of ACM.