The Next 10 Years: the shape of software to come and what if means for software engineering

Anthony Finkelstein

University College London, London, United Kingdom a.finkelstein@ucl.ac.uk

Software engineering provides the method, tools and processes to support the development of complex software systems. As a discipline it must necessarily respond and adapt to the types of system that people want to build and the business context in which software development takes place. We have already seen major changes away from monolithic, custom-built systems to much more highly componentised distributed systems incorporating software packages, glue code and scripting. These changes have been paralleled by changes in the software business with outsourced development and community sourced middleware.

In this talk I examine the next set of transformations in the software business, some already evident, such as 'apps' and 'cloud' infrastructure, as well as some more speculative developments. I consider their implications for software engineering research and practice. We will pay particular attention to developments in technologies related to data management and interoperability.