

Keynote by Prof. Siobhán Clarke

Title: Exploring Different Software Paradigms in Adaptive Systems

Abstract: Software massively permeates society, from governance to business to our personal lives. Software applications are therefore as complex as society, and subject to a corresponding need to adapt. Over the last decade, my team has explored the requirements for, and execution of, adaptation in a range of application types. We found that we naturally veered towards different software paradigms in different circumstances – e.g., multi-agent systems when autonomous entities were required, or service-oriented computing when large-scale adaptive composition of behaviours was required. In this talk, I share our experiences with different classes of systems, and discuss open challenges for the adaptive systems research community.