ABSTRACT

SPRUCE (Systems and Software Producibility Collaboration and Experimentation Environment) is an open web portal and experimentation environment to bring together software developers, software technology users, and software engineering researchers by collaborating on specifying and solving software producibility challenge problems. The SPRUCE approach emphasizes: (1) collaboration around well-defined challenge problems with project-specific artifacts that are representative of large-scale engineering projects; and (2) experimentation for reproducing the stated problems, establishing benchmarks and evaluating solutions.

In this demonstration, we will showcase SPRUCE’s key features, including self-organizing communities of interest (CoI), dynamically evolving challenge problems with accompanying artifacts, and built-in experimentation facilities to reproduce the problems and evaluate solutions. Finally, we will highlight early experiences and results with representative challenge problems.

PRESENTER

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BIOGRAPHY

Dr. Richard Buskens is a Manager of Advanced Software Technology Research at Lockheed Martin Advanced Technology Laboratories (ATL). He has over 18 years of Software Engineering experience. Since joining Lockheed Martin in October 2006, Dr. Buskens has assumed the role of technical program manager of Lockheed Martin’s Software Technology Initiative, which aims to demonstrate innovative technologies that can lead to software development that is five times faster and one-fifth the cost of current software development methods. Dr. Buskens is the principal investigator for the ATL team’s participation in AFRL’s Systems and Software Test Track Phase II program, called SPRUCE. Prior to joining LM ATL, Dr. Buskens worked at Bell Laboratories for 12 years in a variety of capacities including leading a 30-person team focused on software engineering technology research. Several of the technologies developed were transitioned into/adopted by Lucent Technologies product units.