

Daniel D. McCracken

Computational Sciences Seminar Series

Wednesday 3:00 p.m., February 16, 2005
HB, Room 121

Dr. Charles F. Widger
Engineering Processes and Tools
Integrated Defense Systems, Boeing

Epistemological Basis for Software Verification

Abstract: Epistemology is a branch of philosophy that studies the nature and grounds of knowledge, especially with reference to its limits and validity. Over the years, several views of this nature have been advanced by such philosophers as John Locke, Gottfried Leibnitz, Immanuel Kant, Georg Hegel, and Charles Peirce. This presentation shows how several techniques that are used in practice for software verification may be organized in terms of these views. The connection is made by considering the nature and grounds of what constitutes verified requirements. Each view is illustrated by its answer to the question of when the testing of software is complete.