Keynote

The Role of Empirical Study in Software Engineering

Although most scientific and engineering disciplines view empiricism as a basic aspect of their discipline, that view has not been the tradition in software engineering. There should be a symbiotic relationship between the development of theories and empirical studies that test and evolve that theory. This talk discusses the role of empirical study in the understanding and improvement of the software product and process. It offers a personal, historical perspective of the use of empiricism through a series of example applications that demonstrate the various roles that empiricism can play. The examples are taken from the author’s own experience and include the use of empirical study to improve an organization’s product quality and productivity in the Software Engineering Laboratory at NASA/Goddard and to evaluate and evolve the effectiveness of various software technologies for use in improving the dependability of software. It also suggests research directions for empirical study in software engineering.

Symposium

Defining a Software Measurement Program:
Matching Software Measurements to Business Goals

Measurement efforts in the software domain have had limited success because the existing measurement approaches and techniques are not easily adapted to different organizations. Often, they take too long to implement, cost too much, and deplete resources from “real work.” Not to mention, the process of establishing a measurement program is complex. These challenges require organizations to make tough decisions specific to their own circumstances, especially within the context of their business objectives. To address these issues, Victor Basili presents a comprehensive approach that ties corporate goals to the software components that are critical to your business in order to identify the most important measures and ones that can be implemented cost effectively. The approach provides a traceable path from goals to measures, a way of expressing assumptions made, the selection of strategies for selecting and implementing goals at various levels, and a mechanism for evolving the goals and measures as the organizational measurement program matures.
Monday, October 2, 2006

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<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>10 a.m.</td>
<td>Registration</td>
<td>Cleary Alumni &amp; Friends Center</td>
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<tr>
<td>10:30 a.m.</td>
<td>Keynote</td>
<td>The Role of Empirical Study in Software Engineering</td>
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<tr>
<td>11:30 a.m.</td>
<td>Reception for Dr. Basili</td>
<td>Cleary Alumni &amp; Friends Center</td>
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<td>3 p.m.</td>
<td>Symposium</td>
<td>Defining a Software Measurement Program: Matching Software Measurements to Business Goals</td>
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<td>4 p.m.</td>
<td>Informal Questions/Social</td>
<td>Cleary Alumni &amp; Friends Center</td>
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All events are open to the public but may we suggest you reserve a place by registering in advance using the form attached.

Persons attending the Lecture Series may park in University Lot #12, the Cleary Alumni & Friends Center at East Avenue & La Crosse Streets.

For further information contact:
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_____ Keynote
_____ Symposium
_____ Social Hour

Other participants from your organization:
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Title ____________________________________________
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Title ____________________________________________

Reservations are due September 29, 2006.

Detach this card and send registration to:
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