Editorial: A New Editor-in-Chief and the State of TSE

John Knight

My term as the Editor-in-Chief of the IEEE Transactions on Software Engineering ended on 31 December 2005 and it is my great pleasure to introduce the new Editor-in-Chief, Professor Jeff Kramer. Jeff is a professor in the Department of Computing at the Imperial College of Science, Technology, and Medicine in London, England. He is a gifted researcher with an extensive portfolio of major research contributions. Jeff is a very active member of the software engineering community and an enthusiastic supporter of the IEEE Transactions on Software Engineering. The journal is in excellent hands and I am delighted that Jeff has agreed to undertake this responsibility.

As I step down as Editor-in-Chief, I am pleased to have this opportunity to thank all of the wonderful staff and volunteers who have helped me during the past four years. I have had the help of two Associate Editors-in-Chief, Gregg Rothermel and Dave Weiss, over most of the past four years. Their assistance has been invaluable in many ways and I am very grateful to them for all their efforts. The day-to-day operations of TSE are handled by the following dedicated staff at the IEEE Computer Society Publications Office in Los Alamitos, California: Selina Flynn, Transactions Assistant, Yu-Tzu Tsai, Steve Wareham, and Richard Mavis, Electronic Media Assistants, Spencer Roper and Kathy Santa Maria, Production Editors, Suzanne Werner, Peer Review Supervisor, and Alicia Stickley, Publications Production Manager. I am very grateful for the anonymous efforts of our reviewers and the work undertaken by the editorial board. Once again I thank the editors who have left the editorial board this year and I welcome those who have joined.

Turning now to the state of the journal, I am pleased to report that the state of the IEEE Transactions on Software Engineering remains good. A total of 341 papers were submitted during calendar year 2005. This is an increase of about 18 percent over 2004 and continues the trend that we have seen in recent years of annual increases in submissions. Even with this impressive number of submissions, the journal has additional publication capacity and I encourage all authors in the software engineering field to submit papers to TSE.

Naturally, many submitted papers are still in the system and being processed. The time from submission to a decision about a paper varies because of many factors, including the length of the manuscript, the workload of the editors involved, and the workloads of the various reviewers. The most recent data available on this time is that it is four months. Our goal is to try to ensure that all submitted papers receive a decision in 90 days or less, and we are continuing to improve the procedures we use to try to achieve that figure. The most recent data available indicates that the journal’s current acceptance rate is 20.8 percent.

As Editor-in-Chief of TSE, I see all of the submitted papers and I am continually amazed at the variety of results being reported and the originality that they demonstrate. When published in TSE, these results become part of the archival record and they provide a major scientific resource for the community. Despite this resource, software remains a significant challenge. Software continues to serve us quite well much of the time, but it remains very expensive and time-consuming to produce and it is frequently much less dependable than is required. The production of software is a critical industry both for the United States and the world. The challenge to produce software that meets our dependability requirement in a cost-effective and timely manner remains and is more urgent than it has ever been. I urge the research community to give the situation as much attention as possible and to provide as much support as possible to those involved in software development and operation. Significant work remains to be done in the solution of fundamental problems, in assisting engineers working in software production to use the research results that have been achieved, in minimizing the risks that developers face in adopting new technology, and in educating engineers at all levels and in all disciplines about effective approaches to software development.

John Knight
Outgoing Editor-in-Chief