Foreword

In 2006, the NASA/IEEE Software Engineering Workshop (SEW-30) celebrated its 30th anniversary, making it (to the best of our knowledge) the longest continually running event in the Software Engineering community. For the first 25 years, the event was known as the NASA Software Engineering Workshop, but has had joint sponsorship from IEEE since then, and IEEE will continue to sponsor the event in future years.

Held as part of the 2nd IEEE Systems and Software Week, at the Loyola College Columbia campus, 25-27 April 2006, the event brought together academic and industrial researchers, students, and government representatives from the USA, Europe, Asia, and Australia.

It is intended that each year Systems and Software Week will bring together different workshops and conferences of interest to the Systems Engineering and Software Engineering communities, with the Software Engineering Workshop being a regular part of the week.

To celebrate the 30th anniversary, SEW-30 had 6 invited keynote speakers, each asked to look either 30 years in the future or 30 years in the past and describe their own particular field’s challenges and successes and to look at possible future solutions. Professor Vic Basili (University of Maryland College Park) gave the opening talk describing his contributions to empirical Software Engineering and in particular its relationship to work with the NASA Software Engineering Laboratory. Professor Tiziana Margaria (University of Potsdam, Germany) described promising work on service-oriented architectures. Professor Judith Bishop (University of Pretoria, South Africa) described new languages for speedy implementation of complex software. Professor David Gries (Cornell University) talked about issues related to Software Engineering education and teaching programming languages. Professor Manfred Broy (Technical University of Munich, Germany) talked about architectures and challenges in the development of complex software for the motor industry. Professor Jim Woodcock (University of York, UK) described progress towards the “grand challenge” of developing a verifying compiler, an initiative that involves a large number of researchers from the verification community.

Several of the keynote speaker’s talks appear in the 60th anniversary issue of “Computer”, the IEEE Computer Society’s flagship publication, published in October 2006. Abstracts of the keynote talks are given in this proceedings, along with links to the online versions.

As always, we must thank the many supporters of SEW, including all of our volunteers, program committee members, the IEEE Computer Society staff in the Washington DC office, and Tom Baldwin, Lisa O’Conner, and Scott Hamilton of IEEE Computer Society Press. A special word of thanks goes to Ben Benokraitis, who performed the vital role of local organizer, and Denis Gračanin, who was our Publicity Chair and webmaster.

We are grateful, as always, to IEEE Computer Society, and in particular Paul Croll and the Technical Council on Software Engineering, for its support, to the staff and management of NASA Goddard Space Flight Center and to the faculty and students of Loyola College in Maryland, for their sponsorship and collaboration.

The 3rd IEEE Systems and Software Week will be held 6-8 March 2007 at the Loyola College main campus in Baltimore. Information on this annual event can be found at http://www.systemsandsoftwareweek.org.

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