

## **Message from the Workshop Chairs**

### **The First International Workshop on Program Debugging in China (IWPDC 2010)**

Welcome to the First International Workshop on Program Debugging in China (IWPDC 2010).

Modern software is increasingly complex. When programs fail, debugging is a de facto strategy to identify the cause of the failures, repair them, and retest the repaired software. Despite decades of research efforts, debugging processes in China are still largely manual. It poses a problem as the size of software increases. On the other hand, automatic fault localization still imprecisely pinpoints the locations of faults and cannot efficiently and reliably capture and replay failed executions; fault repair shows unsatisfactory progress; and the information presented to developers do not precisely help them answer debugging questions. Furthermore, formal verification techniques do not scale well to support large and complex applications, static techniques are often imprecise, and dynamic techniques may involve heavy performance overhead. Large-scale applications may be developed using heterogeneous programming languages and platforms, whereas research techniques usually assume homogeneity. All of these widen the gap between what research proposals can offer and what the industry in China needs, so that practitioners recede from adopting various advanced research proposals.

China is emerging to become an innovation center. The software industry is one of the key directions in the modern world. The International Workshop on Program Debugging in China serves as an academic forum that brings researchers, managers, developers, and other stakeholders together to present new research ideas and inspiring experiences consolidated from the application of existing techniques to industrial case studies, and crystallize the challenges faced by the software industry in China.

We have accepted 2 full papers and 2 short papers. Each paper was thoroughly reviewed by four PC members.

The success of IWPDC 2010 relies entirely on its program committee, consisting of members not only from the mainland of China but also Australia, Hong Kong, Singapore, Taiwan, and USA. We are most grateful to you for your excellent reviews.

We would like also to thank all the authors and participants of this workshop. The workshop would not have taken place without your enthusiastic support.

Finally, we should extend our appreciation to the organizers of QSIC 2010 for encouraging us to host this workshop.

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