Call for Papers

1st International Workshop on
Field Failure Data Analysis: Challenges and Approaches (F2DA 2009)

Held in conjunction with SRDS 2009, Niagara Falls, New York, U.S.A., September 27, 2009
http://www.cse.buffalo.edu/srds2009/F2DA.html

Since early days of computing systems, researchers and engineers have recognized the crucial role of Field Failure Data Analysis (FFDA) in characterizing the failure behavior of systems and guiding the design of error detection and recovery mechanisms. The information on spontaneous occurrences of systems/applications failures is usually collected in a variety of error logs. Analysis of this data can provide useful insight into understanding of error propagation patterns, enables identification of dependability bottlenecks, and quantification of metrics such as reliability, availability, or sensitivity to malicious attacks. Despite of the many studies analyzing failure data from variety of computing systems, a number of research and practical questions remain unanswered. For instance, it is well-understood that the quality of the analysis heavily depends on the quality of the available field failure data (i.e., system logs or failure reports). However, there are no commonly accepted criteria and/or methodologies to define how (what sources to use) to gather high quality data and how to process the data to obtain the meaningful unbiased results. Also, it is not clear whether traditional FFDA techniques are suitable to conduct the dependability evaluation of current and future generation systems, e.g., autonomic and/or ubiquitous systems, embedded systems, and mashup web applications.

GOALS: This workshop aims to foster lively discussion and advance the state-of-the art in filed failure data analysis of current and future systems. The event provides an open forum to industry practitioners and academia to share experience and ideas on open issues and future trends in analyzing and using the field failure data.

The major areas of interest include, but are not limited to, the following:

- Methods, tools, and infrastructures for field data gathering and management
- Data formats and data archiving
- Methodologies and tools for failure data processing, e.g., efficient algorithms for data filtering and correlation analysis
- Failure data driven design of dependable systems and applications
- Challenges in collecting and analysis of failure data from emerging systems/applications, e.g., smart handheld devices or sensor networks
- Dependability evaluation using field data

WORKSHOP COMMITTEE:

- **Chair:** Domenico Cotroneo, University of Naples Federico II
- **Co-Chair:** Zbigniew Kalbarczyk, University of Illinois at Urbana-Champaign
- Bianca Schroeder, Carnegie Mellon University, USA
- Brendan Murphy, Microsoft Research,UK
- Marcello Cinque, Univ. of Naples Federico II
- Marco Vieira, University of Coimbra, Portugal
- Miroslaw Malek Humboldt University Berlin, Germany
- Paolo Lollini, University of Florence, Italy
- Brendan Murphy, Microsoft Research, UK

SUBMISSION GUIDELINES:

Authors should prepare a Portable Document Format (PDF) version of their full paper. Regular papers must be no longer than 10 pages, papers on evolving research and work in progress should be no longer than 5 pages, following the IEEE two-column format for conference proceedings. The font size must be no smaller than 10 points, and must fit properly on US "Letter"-sized paper (8.5 x 11 inches). All the submissions should be made through EasyChair (http://www.easychair.org/conferences/?conf=f2da09).

PUBLICATION:

All submitted papers will be peer-reviewed and the accepted papers will be included in a Workshop Proceedings distributed at the Symposium. The papers will also be made available online from the workshop webpage: http://www.cse.buffalo.edu/srds2009/F2DA.html

IMPORTANT DATES:

- Submission deadline: **July 6, 2009**
- Author notification: **August 10, 2009**
- Camera-ready: **August 31, 2009**
- Workshop: **September 27, 2009**

For more details, contact: Prof. Domenico Cotroneo at cotroneo@unina.it. Visit: http://www.cse.buffalo.edu/srds2009