





# **IEEE 19th Asian Test Symposium**

## December 1-4, 2010, Shanghai University, China









SHERATON Hotel, http://ats10.shu.edu.cn

#### **General Chair:**

#### Shiyi Xu,

Shanghai University (China)

xusy@shu.edu.cn

**Program Co-Chairs:** 

#### Jianhua Gao,

Shanghai Normal University (China)

jhgao@shnu.edu.cn

#### Yasuo Sato.

Kyushu Institute of Technology(Japan) sato@aries30.cse.kyutech.ac.jp

#### **Tutorial Chair:**

#### Jianhui Jiang,

Tongji University (China)

jhjiang@tongji.edu.cn

#### Finance Chair:

#### Hua Liu,

Shanghai University (China)

#### Publication Chair:

Ouan Oian.

Shanghai University (China)

#### Publicity Chair:

Rui Zhang,

Shanghai University (China) Local Arrangement Chair:

### Xin Fu.

Shanghai Normal University (China)

Registration Chair:

Juniie Peng.

Shanghai University (China) Steering Committee Chair:

#### Seiji Kajihara,

Kyushu Institute of Technology(Japan)

#### **Program Committee:**

Program Committee:
Jacob A Abraham (USA)
Vishwani Agrawal (USA)
Jean Arlat (France)
Krishnendu Chakrabarty (USA)
Krishna Chakravadhanula (USA)
Debesh K Das (India)
Kiyoshi Furuya (Japan)
Jianhua Gao (China)
Patrick Girard (France)
Sandeep Gupta (USA)
Masaki Hashizume (Japan)
Kazumi Hatayama (Japan)
Hiromi Hiraishi (Japan)
Michael Hobbs (Australia) Kazumi Hatayama (Japan)
Hiromi Hiraishi (Japan)
Michael Hobbs (Australia)
Michael S. Hsiao (USA)
Yu Hu (China)
Chih-Tsun Huang (Taiwan)
Jiun-Lang Huang (Taiwan)
Jiun-Lang Huang (Taiwan)
Shi-Yu Huang (Taiwan)
Yu Huang (USA)
Michiko Inoue (Japan)
Tomoo Inoue (Japan)
Tomoo Inoue (Japan)
Kazuhiko Iwasaki (Japan)
Jianhui Jiang (China)
Seiji Kajihara (Japan)
Sungho Kang (Korea)
Rohit Kapur (USA)
Tohru Kikuno (Japan)
Jishun Kuang (China)
Erik Larsson (Sweden)
Kuen-Jong Lee (Taiwan)
Huawei Li (China)
Katherine Shu-Min Li (Taiwan)
Huayuo Liang (China)
Shyue-Kung Lu (Taiwan)
Huakou Miao (China)
Subhasish Mitra (USA)
Fidel Muradali (USA)
Satoshi Ohtake (Japan)
Jahan-François Pāris (USA) Subnasish Mitra (USA)
Fidel Muradali (USA)
Satoshi Ohtake (Japan)
Jehan-François Pâris (USA)
Zebo Peng (Sweden)
Ilia Polian (Germany)
Ilia Polian (Germany)
Irith Pomeranz (USA)
Sudhakar M Reddy (USA)
Michal Renovell (France)
Kewal K. Saluja (USA)
Indranil Sengupta (India)
Peilin Song (USA)
Chauchin Su (Taiwan)
Hiroshi Takahashi (Japan)
Nur A. Touba (USA)
Marco Vieira (Portugal)
Sying-Jyan Wang (Taiwan)
Li-C. Wang (USA)
Seongmoon Wang (USA)
Xiaoqing Wen (Japan)
Yue Wu (China)
Cheng-Wen Wu (Taiwan)
Qiang Xu (Hong Kong)
Xiaozong Yang (China)

#### CALL **PAPERS** FOR



ATS 2010 is the nineteenth in this series of symposia started in 1992 that are devoted to testing and fault tolerant computing. ATS is now recognized as the main regular event of the word that is covering the many dimensions of Testing for computing systems. The symposium will be organized by the Shanghai University, Shanghai, the most modernized city of China. Shanghai is a vibrant blend of traditional culture and cosmopolitan life and it is the economic, educational and recreational center of the country, offering a variety of significant cultural sights. The famous 2010 World Expo will be held in Shanghai where a number of brilliant buildings and exhibition halls in different styles will be shown to the world.

#### **Objective:**

Following the traditions set up by its predecessors, this year ATS 2010 aims at providing a more open forum for worldwide researchers and industrial practitioners to exchange their innovative ideas on testing technology for both hardware and software in computing systems. ATS 2010 will stress its theme on the "New development and applications of testing technology", covering all aspects of technical issues on design-for-testability, test integration, diagnosis, repair, and yield enhancement of a complex chip with embedded digital, analog, and/or memory components.

Original contributions on VLSI testing are solicited. Topics of interest include, but are not limited to, the following categories:

- 1. Test generation & fault simulation
- 3. Fault diagnosis
- 5. Memory testing and FPGA testing
- 7. Delay fault testing / Low power testing
- 9. System-on-a-chip-test/ System-in-package test 10. Network-on-a-chip testing
- 11. Software testing / verification
- 13. Failure analysis / fault modeling
- 15. Fault tolerance / error correction
- 17. IDDQ testing
- 19. Test standard: IEEE 1500, boundary scan
- 21. Automatic test equipment

- 2. DfX: Design for testability, reliability, dependability...
- 4. Analog & mixed-signal testing / RF/ High speed I/O testing
- 6. Wafer-level testing
- 8. Board and system testing / On-line testing
- 12. CPU testing
- 14. Built-in self-test / Embedded testing
- 16. Functional testing
- 18. Test economics
- 20. Test experience in industry
- 22. Yield Enhancement / Silicon debug

## Paper Submissions:

Manuscripts should be submitted in the following categories: Regular Papers and Practical Experience Reports. Regular Papers should describe original research (not submitted or published elsewhere) and be not more than 20 double-spaced pages including figures and tables using 11- point type. Practical Experience Reports (of 5-12 pages) should describe an experience or a case study, such as the design and deployment of a system or actual failure and recovery field data. The title page should include a 150-word abstract, five keywords, authors' names and affiliations and a line specifying whether the submission is a Regular Paper or a Practical Experience Report. The full mailing address, phone, fax and email address of the corresponding author should be specified. All submissions must be made electronically (in PDF format) on web site (http://ats10.shu.edu.cn). Please visit our web site for full submission instructions and updated information on the symposium.

Papers will be reviewed internationally and selected based on their originality, significance, relevance, and clarity of presentation. All accepted papers will be published in ATS Proceedings by IEEE Computer Society Conference Publication Service (CPS) and will be EI and ISTP indexed.

 $\begin{array}{c} \textbf{Important Dates Due} \\ \textbf{Submission: May 24}^{th} \ 2010; \ \textbf{Notification: July 14}^{th} \ 2010; \ \textbf{Final Version: August 18}^{th} \ 2010 \\ \textbf{Tutorial: December 1}^{st}, \ 2010 \ ; \ \textbf{Symposium: December 2}^{nd}, \ 2010 \end{array}$ 

Sponsored by **IEEE Computer Society & Shanghai University** 

**In Cooperation With** 

Shanghai Normal University

National Natural Science Foundation of China (NSFC)

China Computer Federation (CCF), Committee of Fault-tolerant Computing (CFTC)