

# Taweessup Apiwattanapong

## Resume

Home:  
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National Electronics and Computer  
Technology Center  
112 Thailand Science Park Phahonyothin Rd.,  
Klong 1, Klong Luang, Pathumthani 12120

### Education

- Aug 2001 – Aug 2007**     **Georgia Institute of Technology**     Atlanta, GA, US  
Ph.D. in Computer Science, College of Computing  
Management of Technology Certificate, College of Management
- Jun 1994 – May 1998**     **King Mongkut's Institute of Technology, Ladkrabang**     Bangkok, TH  
Bachelor of Engineering in Computer Engineering,  
Ranked first in class of Computer Engineering majors

### Professional Experience

- Oct 2007 – Current**     **National Electronics and Computer Technology Center (NECTEC)**     Prathumthani, TH  
Researcher
- Aug 2002 – Aug 2007**     **Georgia Institute of Technology**     Atlanta, GA, US  
Graduate Research Assistant, College of Computing
- Jun 1998 – Mar 2001**     **Siam Cement Public Co., Ltd.**     Bangkok, TH  
Analyst, Information Technology Center
- SAP R/3 Implement Team Member, responsible for implementing SAP Purchasing and Logistics Module, including staff training and user manual documenting, for 20 affiliated companies in 3 different business areas
  - ABAP/4 Programmer, responsible for coding customized reports and developing interface programs to communicate with Barcode systems
  - SAP R/3 Business Information Warehouse Implement Team Member, responsible for designing the database structures of data warehouse for 14 affiliated companies in Paper and Packaging business
- Summer 1997**     **Ayudhya Investment and Trust Public Co., Ltd.**     Bangkok, TH  
Application Programmer Internship, responsible for developing stock data transfer and visualization system that receives data from Stock Exchange of Thailand, decodes and displays information to customers' terminals.

### Teaching Experience

- Nov 2007 – Mar 2008    **Sirindhorn International Institute of Technology**    Pathumthani, TH  
– Management Information Systems (3<sup>rd</sup>-year Industrial Engineering course)
- June 2008 – Sep 2008    **Thammasat University**    Pathumthani, TH  
– Software Process and Quality Assurance (3<sup>rd</sup>-year Computer Science course)

### Awards

- Aug 2001 – Aug 2005    Royal Thai Government Scholarship

### Affiliations

- Mar 2002 – Aug 2007    Member, Association for Computing Machinery and SIGSOFT
- Aug 2001 – Aug 2007    Member, Aristotle Program Analysis Research Group
- Aug 2001 – Aug 2007    Member, Thai Student Organization, Georgia Tech
- Jun 1994 – May 1998    Member, Academic Club, KMIT'L

### Publications (in reverse chronological order)

1. Raul Santelices, Pavan Kumar Chittimalli, Taweessup Apiwattanapong, Alessandro Orso, and Mary Jean Harrold. "Test-suite Augmentation for Evolving Software." *Proceedings of the 23<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering*. L'Aquila, Italy. September 2008.
2. Taweessup Apiwattanapong. "Identifying Testing Requirements for Modified Software." *PhD Dissertation*. Georgia Institute of Technology. August 2007.
3. Taweessup Apiwattanapong, Alessandro Orso, and Mary Jean Harrold. "Jdiff: A Differencing Technique and Tool for Object-oriented Programs." *Journal of Automated Software Engineering*, volume 14(1). March 2007. (a previous version appeared in ASE 2004)
4. Taweessup Apiwattanapong, Raul Santelices, Pavan Kumar Chittimalli, Alessandro Orso, and Mary Jean Harrold. "MaTRIX: Maintenance-oriented Testing Requirements Identifier and Examiner." *Proceedings of the Testing: Academic and Industrial Conference, Windsor, UK*. August 2006.
5. Taweessup Apiwattanapong, Alessandro Orso, and Mary Jean Harrold. "Efficient and Precise Dynamic Impact Analysis Using Execute-After Sequences." *Proceedings of the 27<sup>th</sup> International Conference on Software Engineering (ICSE 2005)*, St. Louis, Missouri, USA, May 2005 (to appear).
6. Taweessup Apiwattanapong, Alessandro Orso, and Mary Jean Harrold. "A Differencing Algorithm for Object-Oriented Programs." *Proceeding of the 19<sup>th</sup> IEEE International Conference on Automated Software Engineering (ASE 2004)*, Linz, Austria, September 2004. (an extended version appeared in ASE Journal, vol.14(1))
7. Alessandro Orso, Taweessup Apiwattanapong, James Law, Gregg Rothermel, and Mary Jean Harrold. "An Empirical Comparison of Dynamic Impact Analysis Algorithms." *Proceeding of the 26<sup>th</sup> International Conference on Software Engineering (ICSE 2004)*, Edinburgh, Scotland, May 2004. (This paper won the Best Paper Award and an ACM-SIGSOFT Distinguished Paper Award.)

8. Alessandro Orso, Taweessup Apiwattanapong, and Mary Jean Harrold. "Leveraging Field Data for Impact Analysis and Regression Testing." *Proceedings of the 11<sup>th</sup> European Software Engineering Conference and 11<sup>th</sup> ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE 2003)*, Helsinki, Finland, September 2003.
9. Alessandro Orso, Taweessup Apiwattanapong, and Mary Jean Harrold. "Improving Impact Analysis and Regression Testing Using Field Data." *Proceeding of the 1<sup>st</sup> ICSE Workshop on Remote Analysis and Measurement of Software Systems (RAMSS'03)*, May 2003.
10. Taweessup Apiwattanapong and Mary Jean Harrold. "Selective Path Profiling." *Proceeding of the ACM SIGPLAN-SIGSOFT Workshop on Program Analysis for Software Tools and Engineering (PASTE'02)*, Charleston, SC, USA, November 2002.