

Workshop on the Evaluation of Software Defect Detection Tools

Sunday, June 12th, 2005
Co-located with PLDI 2005

Workshop co-chairs: William Pugh (University of Maryland) and Jim Larus (Microsoft Research)

Program chair: Dawson Engler (Stanford University)

Program Committee: Andy Chou, Manuvir Das, Michael Ernst, Cormac Flanagan, Dan Grossman, Jonathan Pincus, Andreas Zeller

| Time | What | Time | What |
|----------|--|---------|--|
| 8:30 am | Discussion on Soundness <ul style="list-style-type: none"> <i>The Soundness of Bugs is What Matters</i>, Patrice Godefroid, Bell Laboratories, Lucent Technologies <i>Soundness and its Role in Bug Detection Systems</i>, Yichen Xie, Mayur Naik, Brian Hackett, Alex Aiken, Stanford University | 2:30 pm | break |
| | | 2:45 pm | Research presentations <ul style="list-style-type: none"> <i>Experience from Developing the Dialyzer: A Static Analysis Tool Detecting Defects in Erlang Applications</i>, Kostis Sagonas, Uppsala University <i>Soundness by Static Analysis and False-alarm Removal by Statistical Analysis: Our Airac Experience</i>, Yungbum Jung, Jaehwang Kim, Jaeho Sin, Kwangkeun Yi, Seoul National University |
| 9:15 am | break | | |
| 9:30 am | Research presentations <ul style="list-style-type: none"> <i>Locating Matching Method Calls by Mining Revision History Data</i>, Benjamin Livshits, Thomas Zimmermann, Stanford University <i>Evaluating a Lightweight Defect Localization Tool</i>, Valentin Dallmeier, Christian Lindig, Andreas Zeller, Saarland University | 3:45 pm | break |
| | | 4:00 pm | Discussion of Benchmarking <ul style="list-style-type: none"> <i>Dynamic Buffer Overflow Detection</i>, Michael Zhivich, Tim Leek, Richard Lippmann, MIT Lincoln Laboratory <i>Using a Diagnostic Corpus of C Programs to Evaluate Buffer Overflow Detection by Static Analysis Tools</i>, Kendra Kratkiewicz, Richard Lippmann, MIT Lincoln Laboratory <i>BugBench: A Benchmark for Evaluating Bug Detection Tools</i>, Shan Lu, Zhenmin Li, Feng Qin, Lin Tan, Pin Zhou, Yuanyuan Zhou, UIUC <i>Benchmarking Bug Detection Tools</i>, Roger Thornton, Fortify Software <i>A Call for a Public Bug and Tool Registry</i>, Jeffrey Foster, Univ. of Maryland <i>Bug Specimens are Important</i>, Jaime Spacco, David Hovemeyer, William Pugh, University Maryland <i>NIST Software Assurance Metrics and Tool Evaluation (SAMATE) Project</i>, Michael Kass, NIST |
| 10:30 am | break | | |
| 10:45 am | Invited talk on Deployment and Adoption, Manuvir Das, Microsoft | | |
| 11:15 am | Discussion of Deployment and Adoption <ul style="list-style-type: none"> <i>The Open Source Proving Grounds</i>, Ben Liblit, University of Wisconsin-Madison <i>Issues in deploying SW defect detection tools</i>, David Cok, Eastman Kodak R&D <i>False Positives Over Time: A Problem in Deploying Static Analysis Tools</i>, Andy Chou, Coverity | | |
| 12 noon | lunch | | |
| 1:00 pm | Research presentations <ul style="list-style-type: none"> <i>Model Checking x86 Executables with CodeSurfer/x86 and WPDS++</i>, Gogul Balakrishnan, Thomas Reps, Nick Kidd, Akash Lal, Junghee Lim, David Melski, Radu Gruian, Suan Yong, Chi-Hua Chen, Tim Teitelbaum, Univ. of Wisconsin <i>Empowering Software Debugging Through Architectural Support for Program Rollback</i>, Radu Teodorescu, Josep Torrellas, UIUC Computer Science <i>EXPLODE: A Lightweight, General Approach to Finding Serious Errors in Storage Systems</i>, Junfeng Yang, Paul Twohey, Ben Pfaff, Can Sar, Dawson Engler, Stanford University | 5:00 pm | Discussion of New Ideas <ul style="list-style-type: none"> <i>Deploying Architectural Support for Software Defect Detection in Future Processors</i>, Yuanyuan Zhou, Josep Torrellas, UIUC <i>Using Historical Information to Improve Bug Finding Techniques</i>, Chadd Williams, Jeffrey Hollingsworth, Univ. of Maryland <i>Locating defects is uncertain</i>, Andreas Zeller, Saarland University <i>Is a Bug Avoidable and How Could It Be Found?</i>, Dan Grossman, Univ. of Washington |
| | | 5:45 pm | wrap up and discussion of future workshops |
| | | 6:00 pm | done |