### MSR-10 Program: Sunday, 2 MAY 2010

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<tr>
<th>Time</th>
<th>Session</th>
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<td>9:00 – 9:15</td>
<td><strong>Welcome to MSR-10 from the chairs</strong></td>
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| 9:15 – 10:30| **Keynote**<br> *Session chair: Jim Whitehead (PC Co-Chair)*<br> **MSR: Mining for Scientific Results?**<br> Prof. Dr. James Herbsleb (Carnegie Mellon University)  
  
  **Abstract:** MSR has established an impressive presence in the intellectual landscape of software engineering in its seven short years. Insights accumulate as methods continue to mature. Results of practical significance attract increasing numbers of papers and attendees each year. Yet I will argue that MSR is insufficiently ambitious. The community should be seeking enduring scientific results as well as immediate impact. I will argue that progress in three directions will help move MSR toward this possible future. First, while "black box" prediction models can be quite useful, the community should be driving toward development of a body of theory that sheds light on the underlying phenomena. Second, the community should not be content just to analyze data that happens to exist, but should tackle the problem of defining the data that would be scientifically useful, and follow up by designing and deploying environments that automatically collect it. Finally, the community should push beyond software artifacts, recognizing that many forms of technical design and production work share fundamental characteristics. We should seek to join forces with other research communities that are analyzing behavioral traces in areas such as social networking, blogs, and online communities. As successful as MSR has been, it has only scratched the surface of its potential to forge a science of socio-technical behavior.  
  
  **Bio:** James Herbsleb is a Professor in the School of Computer Science at Carnegie Mellon University. His research interests focus on collaboration and coordination in software and systems engineering projects. His research iterates over empirical studies, theory development, and design and deployment of technology. Before accepting a position at CMU, Herbsleb led the Bell Labs Collaboratory project, which focused on understanding and solving issues in geographically-distributed software development. He holds a PhD (psychology) and a JD (law) from the University of Nebraska, and a MS (computer science) from the University of Michigan, where he also completed a post-doctoral fellowship. |
| 10:30 – 11:00| Coffee break |
| 11:00 – 12:30| **Paper session #1: BUGS, BUGS, BUGS**  
  
  **Session chair: Miryung Kim**  
  
  Predicting the Severity of a Reported Bug.<br> *Ahmed Lamkanfi, Serge Demeyer, Emanuel Giger and Bart Goethals.*  
  
  Identifying Security Bug Reports via Text Mining: An Industrial Case Study.<br> *Michael Gegick, Pete Rotella and Tao Xie.*  
  
  Assessing UML Design Metrics for Predicting Fault-prone Classes in a Java System.<br> *Ariadi Nugroho, Michel R.V. Chaudron and Erik Arisholm.*  
  
  An Extensive Comparison of Bug Prediction Approaches.<br> *Marco D'Ambros, Michele Lanza and Romain Robbes.* |
| 12:30 – 14:00| Lunch break |
| 14:00 – 15:30| **Paper session #2: EVOLUTION & QUALITY**  
  
  **Session chair: Michael Godfrey**  
  
  The Evolution of ANT Build Systems.<br> *Shane McIntosh, Bram Adams and Ahmed E. Hassan.*  
  
  The Ultimate Debian Database: Consolidating Bazaar Metadata for Quality Assurance and Data Mining.<br> *Lucas Nussbaum and Stefano Zacchioli.*  
  
  When Process Data Quality Affects the Number of Bugs: Correlations in Software Engineering Datasets.<br> *Adrian Bachmann and Abraham Bernstein.*  
  
| 15:30 – 16:00| Coffee break |
**16:00 – 16:45**

**Mining Challenge: FreeBSD, GNOME Desktop and Debian/Ubuntu**  
*Session chair: Abram Hindle (Challenge Chair)*

- Perspectives on Bugs in the Debian Bug Tracking System.  
  *Julius Davies, Hanyu Zhang, Lucas Nussbaum and Daniel M. German.*

- Mining Security Changes in FreeBSD.  
  *Andreas Mauczka, Christian Schanes, Florian Fankhauser, Mario Bernhart and Thomas Grechenig.*

- Assessment of Issue Handling Efficiency.  
  *Bart Luijten, Joost Visser and Andy Zaidman.*

- Cloning and Copying between GNOME Projects.  
  *Jens Krinke, Nicolas Gold, Yue Jia and David Binkley.*

- Finding File Clones in FreeBSD Ports Collection.  
  *Yusuke Sasaki, Tetsuo Yamamoto, Yasuhiro Hayase and Katsuro Inoue.*

- A Comparative Exploration of FreeBSD Bug Lifetimes.  
  *Gargi Bougie, Christoph Treude, Daniel M. German and Margaret-Anne Storey.*

**16:45 – 17:30**

**Short papers**  
*Session chair: Ahmed E. Hassan*

- Assessing the Precision of FindBugs by Mining Java Projects Developed at a University.  
  *Antonio Vetro, Marco Torchiano and Maurizio Morisio.*

- Abstracting Log Lines to Log Event Types for Mining Software System Logs.  
  *Melyappan Nagappan and Mladen A. Vouk.*

- Do Stacktraces Help Developers Fix Bugs?  
  *Adrian Schröter, Nicolas Bettenburg and Rahul Premraj.*

- Thex: Mining Metapatterns from Java.  
  *Daryl Posnett, Christian Bird and Premkumar Devanbu.*

  *Methanias Colaço Júnior, Manoel Mendoça, Mario Farias, and Paulo Henrique.*

**Evening**  
19:00

**Conference dinner**

**Africa Cafe**  
108 Shortmarket Street  
Cape Town, South Africa  
Web: africacafe.co.za  
Twitter: @africacafe

- 15 minute walk from the Convention Centre.

- For directions, see the Google Map on the right.
MSR-10 Program: Monday, 3 MAY 2010

9:00 – 9:15  |  Awards

9:15 – 10:30  |  Keynote

**Session chair: Thomas Zimmermann (MSR PC Co-Chair)**

**The Visual Terminator**

Prof. Dr. Michele Lanza (University of Lugano)

Abstract: In this talk, machines take over the world in the near future, directed by the artificially intelligent computer Vinet. With its sole mission to completely annihilate developers, it creates emas assassins called Terminators that carry the outward appearance of software engineers. The software visualization resistance is there to defeat them and free developers. With a human victory imminent, the machines’ only choice is to send a Terminator back in time to kill Playfair and Bertin, preventing the resistance from ever being founded. With the fate of software visualization at stake, the resistance sends a keynote speaker back to ensure its own existence.

Bio: Michele Lanza is associate professor of the faculty of informatics, which he co-founded in 2004. His doctoral dissertation, completed in 2003 at the University of Bern, received the European Ernst Denert award for best thesis in software engineering of 2003. Prof. Lanza received the Credit Suisse Award for best teaching in 2007 and 2009. Prof. Lanza is involved in a number of scientific communities, and has served on more than 60 program committees. He is vice-president of CHOOSE (the Swiss Object-Oriented Software Engineering society). He was program co-chair of ICSM (International Conference on Software Maintenance) in 2010, of MSR (Working Conference on Mining Software Repositories) in 2007 and 2008, of VISSOFT (International Workshop on Visualizing Software) in 2009, and of IWPESE (International Workshop on Principles of Software Evolution) in 2007. He was General Chair of ESUG 2007 (15th International Smalltalk Conference). He is steering committee member of MSR, VISSOFT, Softvis, and IWPESE. At the University of Lugano Prof. Lanza leads the REVEAL research group, working in the areas of software visualization, evolution, and reverse engineering. He authored more than 70 technical papers and the book “Object-Oriented Metrics in Practice”. He was there when visualization tools such as CodeCrawler, Evolution Matrix, CodeCity, Softwareaut, SPO, Evolution Radar, and X-Ray saw the light.

10:30 – 11:00  |  Coffee break

11:00 – 12:30  |  Paper session #3: SEARCH & RECOMMENDATION

**Session chair: Andrew Begel**

Automated Dependency Resolution for Open Source Software.

Joel Ossher, Sushil Bajracharya and Cristina Lopes.

Mining Subclassing Directives to Improve Framework Reuse

Marcel Bruch, Mira Mezini and Martin Monperrus.

Identifying Licensing of Jar Archives using a Code-Search Approach.

Massimiliano Di Penta, Daniel M. German and Giuliano Antonioli.

Replaying IDE Interactions to Evaluate and Improve Change Prediction Approaches.

Romain Robbes, Damien Pallet and Michele Lanza

12:30 – 14:00  |  Lunch break

14:00 – 14:45  |  Invited talk from ESEM 2009

**Session chair: Audris Mockus (MSR General Chair)**

**Using Differences Among Replications of Software Engineering Experiments to Gain Knowledge**

Prof. Dr. Natalia Juristo (Universidad Politécnica de Madrid)

Prof. Dr. Sira Vegas (Universidad Politécnica de Madrid)

Abstract: In no science or engineering discipline does it make sense to speak of isolated experiments. The results of a single experiment cannot be viewed as representative of the underlying reality. The concept of experiment is closely related to replication. Experiment replication is the repetition of an experiment to double-check its results. Multiple replications of an experiment increase the credibility of its results. Software engineering has tried its hand at the identical repetition of experiments in the way of the natural sciences (physics, chemistry, etc.). After numerous attempts over the years, excepting experiments repeated by the same researchers at the same site, no exact replications have yet been achieved. One key reason for this is the complexity of the software development setting. This complexity prevents the many experimental conditions from being reproduced identically. This paper reports research into whether non-exact replications can be of any use. We propose a process that allows researchers to generate new knowledge when running non-exact replications. To illustrate the advantages of the proposed process, two different replications of an experiment are shown.
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| 14:45 – 15:30 | **Paper session #4: REPLICATION**  
  *Session chair: Rahul Premraj*  
  Replicating MSR: A Study of the Potential Replicability of Papers Published in the Mining Software Repositories Proceedings.  
  *Gregorio Robles.* |
| 15:30 – 16:00 | **Coffee break**                                                        |
| 16:00 – 17:15 | **Paper session #5: PEOPLE & COLLABORATION**  
  *Session chair: Daniela Damian*  
  Should I Contribute to this discussion?  
  *Walid M. Ibrahim, Nicolas Bettenburg, Emad Shihab, Bram Adams and Ahmed E. Hassan.*  
  Can Development Work Describe Itself?  
  *Walid Maalej and Hans-Jörg Happel.*  
  Validity of Network Analyses in Open Source Projects.  
  *Roozbeh Nia, Christian Bird, Premkumar Devanbu and Vladimir Filkov.* |
| 17:15 – 17:30 | **Closing remarks and Announcement of MSR-11**  
  MSR 2011: 8th Working Conference on Mining Software Repositories  
  May 21–22, 2011.  
  Waikiki, Honolulu, Hawaii.  
  http://msrconf.org/msr2011/  
  Twitter: @msrconf |