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Technical Program

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## TECHNICAL PROGRAM

### Overall Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Location</th>
<th>Location</th>
</tr>
</thead>
</table>
| Oct. 23 (morning) | **Workshop**  
2nd International Workshop on Empirical Studies in Reverse Engineering (WESRE 2006) | **Workshop**  
2nd International Workshop on Program Comprehension through Dynamic Analysis (PCODA 2006) | **Tutorial**  
Case Studies for Reverse Engineers |
| Oct. 23 (afternoon) | **Tutorial**  
Case Studies for Reverse Engineers | **Workshop**  
1st International Workshop on Design Patterns Detection for Reverse Engineering (DPD4RE 2006) | **WCRE 2006 Doctoral Symposium** |
| Oct. 24 (morning) | **Workshop**  
The 9th ASTReNet Workshop: IEEE International Astreinet Aspect Analysis (AAA) Workshop | **WCRE 2006 Doctoral Symposium** | |
| Oct. 24 (afternoon) | **Main conference**  
Technical Program Day 1 | **Main conference**  
Technical Program Day 2 | **Main conference**  
Technical Program Day 3 |
| Oct. 25 (full day) | **Main conference**  
Technical Program Day 1 | **Main conference**  
Technical Program Day 2 | **Main conference**  
Technical Program Day 3 |
| Oct. 26 (full day) | **Main conference**  
Technical Program Day 2 | **Main conference**  
Technical Program Day 3 | |
| Oct. 27 (full day) | **Main conference**  
Technical Program Day 3 | | |
TECHNICAL PROGRAM

**October 23, 2006** Special Sessions and Co-Located Events Program
Location: Rectorate, University of Sannio (N. 5 on the Map)

Morning, Red room - Rectorate
http://softeng.polito.it/events/WESRE2006/

**2nd International Workshop on Code Based Software Security Assessments (CoBaSSA 2006)**
Afternoon, Red room - Rectorate
http://swerl.tudelft.nl/leon/cobassa2006/

**2nd International Workshop on Program Comprehension through Dynamic Analysis (PCODA 2006)**
Full Day, Blue room - Rectorate
http://www.lore.ua.ac.be/Events/PCODA2006/

**Tutorial: Case Studies for Reverse Engineers**
by Susan Elliott Sim
Afternoon, Blue room - Rectorate
October 24, 2006 Special Sessions and Co-Located Events Program
Location: Rectorate, University of Sannio (N. 5 on the Map)

The 9th ASTReNet Workshop: IEEE International Astrenet Aspect Analysis (AAA) Workshop
Full Day, Red room - Rectorate

1st International Workshop on Design Patterns Detection for Reverse Engineering (DPD4RE 2006)
Morning, Blue room - Rectorate
http://www.rcost.unisannio.it/wcre2006/colocated_events/DPD4RE.htm

WCRE 2006 Doctoral Symposium
Afternoon, Blue room - Rectorate

- On the Use of Process Trails to Understand Software Development
  Luigi Cerulo
- Pattern-based Reengineering of Software Systems
  Matthias Meyer
- Concept and implementation of the programming language and translator, for embedded systems, based on machine code decompilation and equivalence between source and executable code
  Samir Ribic
- Quality Assessment of Enterprise Software Systems
  Cristina Marinescu
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.00-9.00</td>
<td>Registration</td>
</tr>
<tr>
<td>9.00-9.30</td>
<td>Welcome and opening</td>
</tr>
</tbody>
</table>
| 9.30-11.00 | Keynote I  
"The Experimental Paradigm in Reverse Engineering: Role, Challenges, and Limitation"  
by Lionel C. Briand |
| 11.00-11.30 | Coffee Break                                                                                                                             |
| 11.30-13.00 | Session I - Empirical Studies - Session Chair: Giuliano Antoniol  
- "Cloning Considered Harmful" Considered Harmful  
  Cory Kapser, and Michael W. Godfrey  
- A common framework for aspect mining based on crosscutting concern sorts  
  Marius Marin, Leon Moonen, and Arie van Deursen  
- Understanding Software Architectures by Visualization – An Experiment with Graphical Elements  
  Jens Knodel, Dirk Muthig, and Matthias Naab |
| 13.00-14.00 | Lunch                                                                                                                                 |
| 14.00-15.30 | Session II - Program Comprehension - Session Chair: Kenny Wong  
- QUARK: Empirical Assessment of Automaton-based Specification Miners  
  David Lo, and Siau-Cheng Khoo  
- An Orchestrated Multi-view Software Architecture Reconstruction Environment  
  Kamran Sartipi, Nima Dezhkam, and Hossein Safyallah  
- An Industrial Case Study of Program Artifacts Viewed During Maintenance Tasks  
  Lijie Zou, and Michael W. Godfrey |
| 15.30-16.00 | Coffee Break                                                                                                                             |
| 16.00-17.30 | Session III - Concept and Feature Location - Session Chair: Andrian Marcus  
- How Programs Represent Reality (and how they don't)  
  Daniel Ratu, and Florian Deissenboeck  
- On Computing the Canonical Features of Software Systems  
  Jay Kothari, Trip Denton, Ali Shokoufandeh, and Spiros Mancoridis  
- An Empirical Study of Executable Concept Slices  
  Dave Binkley, Nicolas Gold, Mark Harman, Zheng Li, and Kiarash Mahdavi |
| 17.30-18.30 | Workshops wrap-up                                                               |
# TECHNICAL PROGRAM

**October 26, 2006** Main Conference Program - Day 2 - Location: Villa dei Papi (N. 8 on the Map)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30-9.00</td>
<td>Registration</td>
</tr>
<tr>
<td>9.00-10.30</td>
<td><strong>Keynote II</strong>&lt;br&gt;&quot;Bits of History, Research Challenges and Autonomic Computing Technology&quot;&lt;br&gt;<em>by Hausi A. Müller</em></td>
</tr>
<tr>
<td>10.30-11.00</td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td>11.00-12.30</td>
<td><strong>Session IV - Migration towards SOA - Session Chair: Paolo Tonella</strong>&lt;br&gt;- A Service-Oriented Componentization Framework for Java Software Systems&lt;br&gt; <em>Shimin Li, and Ladan Tahvildari</em>&lt;br&gt;- Reverse Engineering of System Interfaces - A report from the field&lt;br&gt; <em>Harry Sneed, and Stephan Sneed</em>&lt;br&gt;- A UML-based Approach for Abstracting Application Interfaces to REST-like Services&lt;br&gt; <em>Markku Laitkorpi, Johannes Koskinen, and Tarja Systä</em></td>
</tr>
<tr>
<td>12.30-13.30</td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td>13.30-15.00</td>
<td><strong>Session V - Data reverse engineering - Session Chair: George E. Kalb</strong>&lt;br&gt;- Insiders and Outsiders Threats Sensitive SQL-injection Vulnerability&lt;br&gt; <em>Ettore Merlo, Dominic Letarte, and Giuliano Antoniol</em>&lt;br&gt;- Data Reverse Engineering using System Dependency Graphs&lt;br&gt; <em>Anthony Cleve, Jean Henrard, and Jean-Luc Hainaut</em>&lt;br&gt;- Extracting Output Formats from Executables&lt;br&gt; <em>Junghee Lim, Thomas Reps, and Ben Liblit</em></td>
</tr>
<tr>
<td>15.00-15.30</td>
<td><strong>Coffee Break</strong></td>
</tr>
<tr>
<td>15.30-17.30</td>
<td><strong>Industrial track - Session Chair: Rene Krikhaar</strong>&lt;br&gt;- Monitoring Requirements to Test using Inferred Links&lt;br&gt; <em>Marco Lormans, Hans-Gerard Gross, Arie van Deursen, and Andre Stehouwer</em>&lt;br&gt;- How Outsourcing Affects the Quality of Mission Critical Software&lt;br&gt; <em>Andrea Capiluppi, and Cornelia Boldyreff</em>&lt;br&gt;- Reverse Engineering in Support of Litigation: Experiences in an Adversarial Environment&lt;br&gt; <em>Anthony Cox</em></td>
</tr>
</tbody>
</table>
## TECHNICAL PROGRAM

**October 27, 2006** Main Conference Program - Day 3 – Location: Villa dei Papi (N. 8 on the Map)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30-9.00</td>
<td><strong>Registration</strong></td>
</tr>
<tr>
<td>9.00-10.30</td>
<td><strong>Session VI - Visualizing Software Evolution - Session Chair: Michael W. Godfrey</strong></td>
</tr>
</tbody>
</table>
|            | - EvoGraph: A Lightweight Approach to Evolutionary and Structural Analysis of Large Software Systems  
|            |   *Michael Fischer, and Harald Gall*                                                     |
|            | - Reverse Engineering with Logical Coupling                                               |
|            |   *Marco D'Ambros, and Michele Lanza*                                                    |
|            | - Visualizing Software Evolution using Animated Storyboards                                |
|            |   *Dirk Beyer, and Ahmed Hassan*                                                         |
| 10.30-11.00| **Coffee Break**                                                                          |
| 11.00-12.30| **Tool Demos - Session Chair: Martin Pinzger**                                            |
|            | - MELIS: an Eclipse Based Environment for the Migration of Legacy Systems to the Web      |
|            |   *Massimo Colosimo, Andrea De Lucia, Rita Francese, Giuseppe Scannello, and Genoveffa Tortora* |
|            | - PODoJA: Packaging Optimizer for Downloadable Java Applications                          |
|            |   *Thierry Bodhuin*                                                                      |
|            | - CPP2XMI: Reverse Engineering of UML Class, Sequence, and Activity Diagrams from C++ Source Code  
|            |   *Elena Korshunova, Marija, Petkovic, Mark van den Brand, and Mohammad Mousavi*         |
|            | - FINT: Tool Support for Aspect Mining                                                    |
|            |   *Marius Marin, Leon Moonen, and Arie van Deursen*                                      |
| 12.30-13.30| **Lunch**                                                                                 |
| 13.30-15.00| **Session VII - Mining software repositories - Session Chair: Ahmed E. Hassan**           |
|            | - Discovering Organizational Aspects from the Source Code History Log during the Product Line Planning Phase - A Case Study  
|            |   *Dharmalingam Ganesan, Dirk Muthig, Jens Knodel, and Kentaro Yoshimura*                 |
|            | - Extracting Change-patterns from CVS Repositories                                         |
|            |   *Salah Bouktif, Yann-Gaël Guéhéneuc, and Giuliano Antoniol*                            |
|            | - Visualization of CVS Repository Information                                             |
|            |   *Xinrong Xie, Denys Poshyvanyk, and Andrian Marcus*                                     |
| 15.00-15.30| **Coffee Break**                                                                         |
# TECHNICAL PROGRAM

**October 27, 2006** Main Conference Program - Day 3 – Location: Villa dei Papi (N. 8 on the Map)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session VIII - Program Analysis - Session Chair: Giuseppe A. Di Lucca</th>
</tr>
</thead>
</table>
| 15.30-17.00| - Perl Fact Extractor  
*Daniel Moise, and Kenny Wong*  
- Clone Detection Using Abstract Syntax Suffix Trees  
*Rainer Koschke, Raimar Falke, and Pierre Frenzel*  
- Refactoring Detection based on UMLDiff change-facts Queries  
*Zhenchang Xing, and Eleni Stroulia* |
<p>| 17.00-18.00| Conference Wrap-up |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
</table>
| Oct. 24| **19.00 - Reception**  
Prof. Michele Benvenuto "Walking through Benevento"  
Location: Palazzo Paolo V  
Meeting point: RCOST (n. 3 on the Map) at 18:45 |
| Oct. 25| **15.00 - Benevento Art by Train (a city guided tour)**  
**17.00 - Visit to Church of Sant’Ilario "Benevento stories"**  
**18.30 - First WCRE Soccer Cup**  
Location: Sporting Club Cretarossa  
**20.30 - Welcome cocktail**  
Location: Sporting Club Cretarossa |
| Oct. 26| **15.00 - Benevento Art by Train (a city guided tour)**  
**17.00 - Visit to Church of Sant’Ilario "Benevento stories"**  
**20.30 - Social dinner and Awards**  
Location: Palazzo ducale, Fragneto Monforte (Benevento)  
Meeting point: Terminal Bus (n. 6 on the Map) at 19:30 |
| Oct. 28| **Excursion to Ravello, Positano and Amalfi**  
Participants: 16 minimum required.  
Cost: € 75.00.  
**Program:**  
08.15 - Leaving from Benevento  
11.00 - Arrival at Positano, in the Amalfi Coast (there will be a stop during the journey).  
11.00-12.30 - Visit of the town of Positano with an English guide.  
12.30 - Leaving Positano to Amalfi  
13.30 - Lunch at a local restaurant in Amalfi (included in the cost of participation)  
14.30 - Visit of the Cathedral of Amalfi.  
16.00 - Leaving Amalfi to Ravello  
16.30-17.30 - Visit of Ravello  
17.30 - Return to Benevento (arrival scheduled at 18.30). |
| Oct. 29| **Visit of Pompei**  
Participants: 16 minimum required.  
Cost: € 62.00.  
**Program:**  
08.15 - Leaving from Benevento  
10.00 - Arrival at Pompei (there will be a stop during the journey).  
10.00-13.00 - Visit of the Pompei archeological site with an English tourist guide.  
13.30 - Lunch at a local restaurant (included in the cost of participation)  
14.30 - Visit of the Basilica of Madonna del Rosario.  
16.30 - Return to Benevento (arrival scheduled at 20.00). |
Map of Benevento with main conference interest points

1. Train Station (Piazza Vittoria Colonna)
2. Grand Hotel Italiano (Via Principe di Napoli, 137)
3. RCOST (Viale Traiano, 1)
4. Hotel Villa Traiano (Viale dei Rettori, 9)
5. Rectorate (Piazza Guerrazzi, 1)
6. Venue of the WCRIE 2008 Workshops, Tutorials and PhD Symposium
7. Terminal Bus (Via Sandro Pertini)
8. Departure for shuttle service to Villa dei Papi
8. Hotel President (Via Pizzaro, 1)
8. Villa dei Papi (Via Partigiani, 1)
8. Venue of the WCRIE 2008 main conference