

Sandro Schulze

Curriculum Vitae

2012-01-10



Coordinates

| | | | |
|----------------|---|-----------------|--------------------|
| Position: | PhD student | E-mail: | sanschul@ovgu.de |
| Affiliation: | Otto-von-Guericke Universität Magdeburg Fakultät für Informatik Universitätsplatz 2, 39106 Magdeburg, Germany | Office: | +49 (391) 6711849 |
| Citizenship: | German | Home: | |
| Town of birth: | Osterburg, Germany | Year of birth: | 1980 |
| | | Marital status: | partner, one child |

Research Interests

My research focuses on methods and tools for analyzing software product lines, specifically with respect to code clones and product line evolution. Amongst others, I am interested in differences between standalone systems and product lines regarding the aforementioned issues. Generally, I am interested in:

- Software engineering (product lines, components, agile methods)
- Software maintenance (reengineering, reverse engineering, evolution, clone detection/analysis)
- Empirical studies (experiments, large-scale system studies)

Education

| | |
|-----------------------|--|
| Aug. 2007 – now | Research Assistant (PhD student) in computer science, University of Magdeburg, Germany |
| Oct. 2000 – Jul. 2007 | Diploma degree in computer science (Diplom-Informatiker), University of Magdeburg, Germany, Grade "A" |

Academic Employment

| | |
|-----------------------|---|
| Apr. 2007 – now | Research Assistant, Host: Prof. Gunter Saake, University of Magdeburg, Germany |
| Oct. 2005 – Jul. 2007 | Research Student, Metop Research Center, Magdeburg, Germany |

Invited Talks and Lectures

- Granularity and Code Cloning in Software Product Lines,
CREST Open Workshop, University College London, November 2011
- Adolescent Years – Re-(verse) Engineering in Feature-Oriented Programming,
FOSD Workshop (lightning talk), Munich, August 2011

Teaching and Advising

Lecture Courses

- Student Conference on Software Engineering and Database System (initially developed by Christian Kästner), 2011
- Database Implementation Techniques, 2009

Exercise Classes

- Database Implementation Techniques, 2009 & 2010

Seminars and others

- Scientific seminar on Databases (mainly about high-dimensional index structures), 2010 & 2011
- Software project on developing plugins for Eclipse, 2010 & 2011

Advising

- Bachelor thesis on A Framework for Code Clone Analysis (in German), Jan Waldvogel, 2011
- Diploma thesis on Secure Data Management in Automotive Systems (in German), Robert Krause, 2010

Memberships

- Association of Computer Machinery (ACM), since 2009
- IEEE, since summer 2011

References

1. Prof. Dr. Gunter Saake, University of Magdeburg,
<http://wwwiti.cs.uni-magdeburg.de/~saake/>

Publications

Electronic versions of all publications are available on the Web:
<http://wwwiti.cs.uni-magdeburg.de/~sanschul/>.

Refereed Conferences

1. Sandro Schulze, Elmar Juergens, and Janet Feigenspan. Analyzing the Effect of Preprocessor Annotations on Code Clones. In *International Working Conference on Source Code Analysis and Manipulation (SCAM)*, pages 115–124. IEEE Computer Society, September 2011. Acceptance rate: 36 % (16/44).
2. Martin Schäler, Sandro Schulze, Ronny Merkel, Gunter Saake, and Jana Dittmann. Reliable Provenance Information for Multimedia Data Using Invertible Fragile Watermarks. In *28th British National Conference on Databases (BNCOD)*, volume 7051 of *LNCS*, pages 3 – 17. Springer, July 2011.
3. Sandro Schulze, Sven Apel, and Christian Kästner. Code Clones in Feature-Oriented Software Product Lines. In *ACM International Conference on Generative Programming and Component Engineering (GPCE)*. ACM Press, October 2010. Acceptance rate: 31 % (18/59).
4. Sandro Schulze, Mario Pukall, Gunter Saake, Tobias Hoppe, and Jana Dittmann. On the Need of Automotive Data Management in Automotive Systems. In *Proceedings 13. GI-Fachtagung Datenbanksysteme für Business, Technologie und Web (BTW)*, Lecture Notes in Informatics, pages 217–227. Gesellschaft für Informatik (GI), March 2009.
5. Sandro Schulze, Tobias Hoppe, Jana Dittmann, and Gunter Saake. Pauschalisierte Sicherheitsbetrachtungen automotiver Systeme. In *Arbeitskonferenz DACH Security*. Ruhr-Universität Bochum, May 2009. 128–141.

Refereed Journal Articles

1. Thomas Thüm, Sandro Schulze, Mario Pukall, Gunter Saake, and Sebastian Günther. Secure and Customizable Data Management for Automotive Systems - A Feasibility Study. *ISRN Software Engineering*, 2012. accepted for publication.
2. Sandro Schulze and Mario Pukall and Tobias Hoppe. IT Security in Automotive Software Development. *GI Softwaretechnik-Trends*, 29(3):23–28, 2009.

Refereed Workshop Papers

1. Sandro Schulze, Thomas Thüm, Martin Kuhlemann, and Gunter Saake. Variant-Preserving Refactoring in Feature-Oriented Software Product Lines. In *International Workshop on Variability Modeling of Software-intensive Systems (VaMoS)*, January 2012. To appear.
2. Martin Schäler, Sandro Schulze, and Stefan Kiltz. Database-Centric Chain-of-Custody in Biometric Forensic Systems. In *The Third European Workshop on Biometrics and Identity Management*, number 6583 in LNCS, pages 250 – 261. Springer, March 2011.
3. Stefan Haun, Sandro Schulze, and Andreas Nuernberger. Towards an Update-Enabled Mediator System using Semantic Web Technology. In *Proc. of GI-Workshop Grundlagen von Datenbanken*, May 2010.
4. Sandro Schulze and Martin Kuhlemann. A Holistic Approach for Processing of Detected Code Clones. In *3rd International Workshop on Software Clones (IWSC)*, Workshop Proceedings of the 13th European Conference on Software Maintenance and Reengineering (CSMR), page 38. IEEE, March 2009.
5. Sandro Schulze and Martin Kuhlemann. Advanced Analysis for Code Clone Removal. In *Proceedings des Workshops der GI-Fachgruppe Software Reengineering (SRE)*, erschienen in den *GI Softwaretechnik-Trends 29(2)*, pages 10–12. Gesellschaft für Informatik (GI), May 2009.
6. Sandro Schulze, Martin Kuhlemann, and Marko Rosenmüller. Towards a Refactoring Guideline Using Code Clone Classification. In *2nd Workshop on Refactoring Tools, Companion of OOPSLA*, pages 1–4. ACM, October 2008.
7. Sandro Schulze, Stefan Kiltz, Tobias Hoppe, and Jana Dittmann. Modelling Data Requirements for a Secure Data Management in Automotive Systems. In *GI-Workshop on Modellbasierte Entwicklung von eingebetteten Fahrzeugfunktionen (MBEFF) at Modellierung 2008*, pages 32–37. TU Braunschweig, March 2008.