

Andreas Holzer

Technische Universität Wien
Institut für Informationssysteme 184/4
Arbeitsbereich FORSYTE
Favoritenstraße 9
1040 Wien, Austria
holzer@forsyte.tuwien.ac.at
<http://www.forsyte.tuwien.ac.at/~holzer>

RESEARCH INTERESTS Improving software quality, model checking, testing, static program analysis, embedded systems

EDUCATION **Technische Universität München** Munich, Germany
October 2004 – November 2006

Master of Science in computer science with distinction. Thesis title: Description Languages for Malicious Software. Thesis supervisor: Prof. Helmut Veith.

Fachhochschule Landshut Landshut, Germany
October 2000 – September 2004

Diploma in computer science with distinction. Thesis title: Optimierung und Portierung der Software und der Mensch-Maschine Schnittstelle eines Cockpit Procedure Trainers zur Anwendung in Virtual Reality. Thesis supervisor: Prof. Gudrun Schiedermeier.

Fachoberschule Deggendorf Deggendorf, Germany
September 1997 – July 1999

Secondary school finished with distinction.

PUBLICATIONS **Refereed Conference and Workshop Papers**

Andreas Holzer, Visar Januzaj, and Stefan Kugele. Towards Resource Consumption-Aware Programming. *International Conference on Software Engineering Advances*, volume 0, pages 490–493, Los Alamitos, CA, USA, 2009. IEEE Computer Society.

Andreas Holzer, Christian Schallhart, Michael Tautschnig, and Helmut Veith. Query-driven program testing. In Neil D. Jones and Markus Müller-Olm, editors, *Proceedings of the Tenth International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI 2009)*, volume 5403 of *Lecture Notes in Computer Science*, pages 151–166, Savannah, GA, USA, January 2009. Springer.

Andreas Holzer, Christian Schallhart, Michael Tautschnig, and Helmut Veith. FShell: Systematic Test Case Generation for Dynamic Analysis and Measurement. In *Proceedings of the 20th International Conference on Computer Aided Verification (CAV 2008)*, volume 5123 of *Lecture Notes in Computer Science*, pages 209–213, Princeton, NJ, USA, July 2008. Springer.

Andreas Holzer, Johannes Kinder, and Helmut Veith. Using Verification Technology to Specify and Detect Malware. In *Computer Aided Systems Theory - EUROCAST 2007, 11th International Conference on Computer Aided Systems Theory*, volume 4739 of *Lecture Notes in Computer Science*, pages 497–504, Las Palmas de Gran Canaria, Spain, February 2007. Springer.

Talks

Andreas Holzer. A Configurable Engine for Query-Driven Test-Case Generation. Joint meeting of groups from Oxford, ETH Zürich, and FORSYTE, April 2009.

Theses

Andreas Holzer. Description Languages for Malicious Software. Master's thesis, Technische Universität München, November 2006.

Andreas Holzer. Optimierung und Portierung der Software und der Mensch-Maschine Schnittstelle eines Cockpit Procedure Trainers zur Anwendung in Virtual Reality. Diploma thesis, Fachhochschule Landshut, September 2004.

**UNIVERSITY
ACTIVITIES**

Winter Term 2009 *Tutor*
Exercises of the course on *Complexity Theory*; Seminar *Software Validation*; Lab course *Program and Model Analysis*

Winter Term 2009 *Supervisor*
Master's Thesis: Vanessa Struve.

Summer Term 2009 *Tutor*
Exercises of the course on *Model Checking*; Seminar *Software Validation*; Lab course *Program and Model Analysis*

Winter Term 2008 *Tutor*
Exercises of the course on *Complexity Theory*; Lab course *Program and Model Analysis*; Seminar *Software Validation*

Summer Term 2008 *Tutor*
Exercises of the course on *Model Checking*

Winter Term 2007 *Tutor*
Lab course *Foundations of Programming*

**PROFESSIONAL
ACTIVITIES**

Conference Referee
5th International Computer Science Symposium in Russia (CSR), 2010; 37th ACM SIGACT-SIGPLAN Symposium on Principles of Programming Languages (POPL), 2010; 21st International Conference on Computer Aided Verification (CAV), 2009; 6th International Colloquium on Theoretical Aspects of Computing (ICTAC), 2009; Formal Methods in Computer Aided Design (FMCAD), 2009; International Symposium On Leveraging Applications of Formal Methods, Verification and Validation (ISoLA), 2008.

**Technische Universität Wien,
Arbeitsbereich FORSYTE** *Research assistant*
Vienna, Austria **since January 2010**
Ph.D. student in the group of Prof. Helmut Veith

Simon Fraser University *Internship*
Vancouver, Canada **November 2008 – December 2008**
Research collaboration with Prof. Dirk Beyer

**Technische Universität Darmstadt,
FG FORSYTE** *Research assistant*
Darmstadt, Germany **April 2008 – December 2009**
Ph.D. student in the group of Prof. Helmut Veith

Technische Universität München, I7 *Research assistant*
Munich, Germany **November 2006 – March 2008**
Ph.D. student in the group of Prof. Helmut Veith

EADS Deutschland GmbH, München *Internship*

Munich, Germany
Intern in MT641 "Simulation Facilities"

March 2003 – July 2003

Critical Reach AG, München
Munich, Germany
Development of a converter for CAD models

Internship
August 2001 – January 2002

**SOFTWARE
PROJECTS**

CPAchecker
Contributing developer

<http://cpachecker.sosy-lab.org/>

OTHER

Languages
German (native language), English (fluent)

Computing
Programming Languages: C, C++, PHP, SQL, Java, Prolog; *Operating Systems:* Linux,
Microsoft Windows, VxWorks; *Revision Control:* Subversion, CVS