### Curriculum Vitae

#### — Personal Data —

Name: Adam Koprowski

Nationality: Polish

Date & place of birth: 27.03.1980, Warsaw, Poland

Tel. number: +31 625 31 65 07

Email: Adam.Koprowski@gmail.com Homepage: http://adam-koprowski.net

Postal address: Carolina Macgillavrylaan 2024, 1098XE, Amsterdam, The Netherlands

#### — EDUCATION —

• PhD in Computer Science

Sep 2004 — Sep 2008

Eindhoven University of Technology

Thesis subject: Termination of Rewriting and Its Certification Supervisor: Hans Zantema, http://www.win.tue.nl/~hzantema

Research interests: formal verification, theorem proving, term rewriting, formal methods.

List of publications and other academic activities provided in separate sections.

• MSc in Computer Science (with honors)

Sep 2003—Jul 2004

Vrije Universiteit Amsterdam (exchange program)

Thesis subject: Coq formalization of the Higher-Order Recursive Path Ordering

• MSc in Computer Science (with honors)

Sep 1999—Jul 2003

Warsaw University

Receiving scholarship for one of the the highest average of grades among fellow students.

#### — Work history —

• Research engineer at MLstate (http://mlstate.com)

 ${\bf Feb~2009--present}$ 

Design & development of an integrated technology (language with persistency, compiler, runtime environment) for development of secure web applications.

Formal verification of software using theorem proving technology.

Technologies/tools: OCaml, Coq

• J2EE system designer/developer at Levia Sp. z o.o. (co-owner)

Aug 2005—Aug 2009

Main technological designer and leader of a team that developed an innovative online auction and bidding web application, http://youdo.pl.

Technologies/tools: Java EE 5, EJB 3.0, JSF, JBoss AS, JBoss Seam, JBoss RichFaces, My-Faces, Facelets, PostgreSQL.

• Postdoctoral researcher at Radboud University Nijmegen (http://ru.nl) Nov 2008—Jul 2009

Main research topic: verification of Hybrid Systems in Coq.

Technologies/tools: OCaml, Coq

• PhD student at Eindhoven University of Technology (http://tue.nl)

Sep 2004—Sep 2008

Main research topic: termination of rewriting and its certification.

Technologies/tools: OCaml, Coq

• Software engineer at SMG/KRC Poland (http://smgkrc.pl)

2002 - 2003

Cooperation concerning several market surveys; development of applications for massive data processing and visualization.

Technologies/tools: C++ Builder.

• Software engineer at QBS (http://qbs.com.pl)

1999 - 2001

Development of business software in close collaboration with customers. Technologies/tools: Java, Borland Pascal, SQL.

#### — Publications —

Excerpt of referred publications; complete list at: http://www.win.tue.nl/~akoprows/publications.html.

### **Patents**

1. Adam Koprowski and Henri Binsztok, System and method for creating a parser generator and associated computer program, PCT/EP2009/059115.

#### Journal articles

- 1. Adam Koprowski and Johannes Waldmann, Max/Plus Tree Automata for Termination of Term Rewriting, Acta Cybernetica, 19(1), 2009.
- 2. Adam Koprowski, Coq Formalization of the Higher-Order Recursive Path Ordering, AAECC (Journal of Applicable Algebra in Engineering, Communication and Computing), 20(5-6), 2009.

# Conference papers

"†" marks prestigious Rank 2 conferences according to the Computer Science Conference Rankings (http://www3.ntu.edu.sg/home/assourav/crank.htm).

- 1. Herman Geuvers, Adam Koprowski, Dan Synek and Eelis van der Weegen, Automated Machine-Checked Hybrid System Safety Proofs, ITP '10 (formerly TPHOL), To appear.
- 2. † Adam Koprowski and Henri Binsztok, TRX: A Formally Verified Parser Interpreter, ESOP '10.
- 3.  $\dagger Adam\ Koprowski\ and\ Johannes\ Waldmann,\ Arctic\ Termination ...\ Below\ Zero,\ RTA$  '08 .
- 4. Adam Koprowski and Hans Zantema, Certification of Proving Termination of Term Rewriting by Matrix Interpretations, SOFSEM '08 .
- 5. † Adam Koprowski and Aart Middeldorp, Predictive Labeling with Dependency Pairs using SAT, CADE '07.
- 6. Adam Koprowski and Hans Zantema, Automation of Recursive Path Ordering for Infinite Labelled Rewrite Systems, IJCAR '06 .
- 7. † Adam Koprowski, TPA: Termination Proved Automatically, RTA '06.
- 8. † Adam Koprowski, Certified Higher-Order Recursive Path Ordering, RTA '06 .
- 9. Adam Koprowski and Hans Zantema, Proving Liveness with Fairness using Rewriting, FroCoS '05.

#### — Hobbies, interests —

- contemporary dance
- long distance running.

## — LANGUAGES —

- Polish: native tongue
- English: fluent (CAE, Certificate in Advanced English)
- Dutch, Spanish, French: basic knowledge ( $\approx 1$  year of courses)

## — References —

References on request.