

(AUGUST 2011, 2011)

# Curriculum Vitae

## Mark Timmer

### PERSONAL DETAILS

Name: Mark Timmer, MSc  
Date of birth: April 15, 1984  
Place of birth: Apeldoorn  
Nationality: Dutch  
Sex: Male  
Marital status: Married  
Address: Perseusstraat 73, 7521 ZB Enschede, The Netherlands  
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### EDUCATION

- 2008 – now PhD Student in Computer Science  
University of Twente, Enschede, The Netherlands  
Topic: Symbolic Reduction of Probabilistic Models
- 2010 – 2011 Master of Science in Science Education and Communication (with honors)  
University of Twente, Enschede, The Netherlands  
Specialisation: Teaching mathematics in high school  
MSc Thesis: “*Rijkere cognitieve eenheden door het benadrukken van synthetische meetkunde tijdens de behandeling van analytische meetkunde*” (grade: 9)  
GPA: 9.1
- 2005 – 2008 Master of Science in Computer Science (with honors)  
University of Twente, Enschede, The Netherlands  
MSc Thesis: “*Evaluating and Predicting Actual Test Coverage*” (grade: 10)  
GPA: 9.5
- 2002 – 2005 Bachelor of Science in Telematics (with honors)  
University of Twente, Enschede, The Netherlands  
BSc Thesis: “*How to identify the speed limiting factor of a TCP flow*” (grade: 10)  
GPA: 9.2

### SCIENTIFIC PUBLICATIONS

- H. Hanssen and M. Timmer. *Confluence versus Ample Sets in Probabilistic Branching Time*. Submitted to the Journal of Logic and Algebraic Programming, 2011.
- J.-P. Katoen, J.C. van de Pol, M.I.A. Stoelinga and M. Timmer. *A linear process-algebraic format with data for probabilistic automata*. Theoretical Computer Science, 2011. To appear.
- M. Timmer. *SCOOP: A Tool for Symbolic Optimisations Of Probabilistic Processes*. In: Proceedings of the 8th International Conference on Quantitative Evaluation of SysTems (QEST), 2011. To appear.
- M.I.A. Stoelinga and M. Timmer. *Efficiënt zoeken in grote tekstbestanden..* Nieuwe Wiskrant 30(4), pp. 35–38, 2011.
- M. Alberink, H. Muijlwijk and M. Timmer. *De sinus: van meetkundige definitie naar analytisch begrip*. Euclides 86(6), pp. 250–252, 2011.

- M. Timmer, H. Brinksma and M.I.A. Stoelinga. *Model-based Testing*. In: Software and Systems Safety: Specification and Verification. NATO Science for Peace and Security Series - D: Information and Communication Security 30. IOS Press, Amsterdam, pp. 1–32, 2011.
- M. Timmer, M.I.A. Stoelinga and J.C. van de Pol. *Confluence reduction for probabilistic systems*. In: Proceedings of the 17th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS), volume 6605 of Lecture Notes in Computer Science, pp. 311–325, Saarbrücken, Germany, 2011.
- J.-P. Katoen, J.C. van de Pol, M.I.A. Stoelinga and M. Timmer. *A linear process-algebraic format for probabilistic systems with data*. In: Proceedings of the 10th International Conference on Application of Concurrency to System Design (ACSD), pp. 213–222, Braga, Portugal. IEEE Computer Society Press, 2010.
- J.C. van de Pol and M. Timmer. *State Space Reduction of Linear Processes Using Control Flow Reconstruction*. In: Proceedings of the 7th International Conference on Automated Technology for Verification and Analysis (ATVA), volume 5799 of Lecture Notes in Computer Science, pp 54–68, Macao, 2009.
- M.I.A. Stoelinga and M. Timmer. *Interpreting a Successful Testing Process: Risk and Actual Coverage*. In: Proceedings of the 3rd IEEE International Symposium on Theoretical Aspects of Software Engineering (TASE), pp 251–258, Tianjin, China. IEEE Computer Society Press, 2009.
- M. Timmer, P.T. de Boer and A. Pras. *How to Identify the Speed Limiting Factor of a TCP Flow*. In: Proceedings of the 4th IEEE/IFIP Workshop on End-to-End Monitoring Techniques and Services (E2EMON), pp. 17-24, Vancouver, Canada. IEEE Computer Society Press, 2006.

#### SCIENTIFIC TALKS

- *Confluence Reduction for Probabilistic Systems. 17th International*. 17th International Conference on Tools and Algorithms for the Construction and Analysis of Systems, 2011. Conference talk.
- *Confluence Reduction for Probabilistic Systems*. 2nd Young Researchers Workshop on Concurrency Theory, 2010. Reviewed talk.
- *A linear process-algebraic format for probabilistic systems with data*. 10th International Conference on Application of Concurrency to System Design, 2010. Conference talk.
- *A Linear Process Algebraic Format for Probabilistic Systems with Data*. 8th Workshop on Quantitative Aspects of Programming Languages, 2010. Reviewed talk.
- *A Linear Process Algebraic Format for Probabilistic Systems*. IPA Herfstdagen, 2009. Invited talk.
- *State Space Reduction of Linear Processes using Control Flow Reconstruction*. 7th Int. Symposium on Automated Technology for Verification and Analysis, 2009. Conference talk.
- *Interpreting a Successful Testing Process: Risk and Actual Coverage*. 3th IEEE/IFIP Int. Symposium on Theoretical Aspects of Software Engineering, 2009. Conference talk.
- *Interpreting a Successful Testing Process: Risk and Actual Coverage*. 3rd Dutch Workshop on Formal Testing Techniques, 2009. Reviewed talk.
- *Interpreting a Successful Testing Process: Risk and Actual Coverage*. 7th Workshop on Quantitative Aspects of Programming Languages, 2009. Reviewed talk.
- *Actual Test Coverage for Embedded Systems*. 14th Dutch Testing Day, 2008. Reviewed talk.
- *How to Identify the Speed Limiting Factor of a TCP Flow*. 4th IEEE/IFIP Workshop on End-to-End Monitoring Techniques and Services, 2006. Workshop talk.

## TEACHING EXPERIENCE

### Awards:

- Educational Award 2009 for the Department of Computer Science (1<sup>st</sup> place).

### Lectures:

- Design and Management (1x)

### Workshops:

- Introduction to L<sup>A</sup>T<sub>E</sub>X (3x)

### Exercise classes:

- Algorithms, Datastructures and Complexity (2x)
- Testing Techniques (4x)
- Programming 1 (3x)
- Programming 2 (3x)
- Basic Models in Computer Science (2x)
- Telematics Systems and Applications (1x)

### Laboratory exercise classes:

- Mathematics and Programming 1 (3x)
- Mathematics and Programming 2 (2x)
- Mathematics and Programming 3 (2x)
- Programming 1 (1x)
- Programming 2 (2x)
- Modelling and Programming (1x)
- Software Engineering Models (1x)

### Teaching assistant (correcting homework):

- Design and Management (3x)
- Signals and Transforms (3x)
- Telematics Networks (1x)
- Algorithms, Datastructures and Complexity (1x)

## MISCELLANEOUS

- Since September 2008 I am a PhD Counsel member of the Dutch Institute for Programming Research and Algorithmics.
- I'm involved in Foundation Neverland, a foundation organising holiday weeks for children that could otherwise not go on holiday. For several year I volunteer during these weeks, and for three years I'm a member of the board in charge of the finances.
- During my studies I participated actively in several associations. For one year I was a full-time member of the board of study association *Inter-Actief*, in charge of external affairs. Also, for one and a half year I was chairman of the ballroom dance association 4 happy feet. On the side I was a member of several committees, organising events such as a formal ball and a trip to Berlin, creating magazines and bulletins, and tending bar.
- During high school I have had several holiday jobs, working for a supermarket, a household shop, and two different banks. Moreover, for several years I worked as an internet journalist for a large Dutch website on computer news ([www.tweakers.net](http://www.tweakers.net)).