

# Curriculum Vitae

## *Martin Toft*

### Personal Information

Born:	November 26, 1984	Phone (private):	+45 29 82 36 59
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		Relationship status:	Single

### Education

2006–2009: Master of Science in Computer Science and Mathematics, elite student programme in embedded software, Aalborg University.

2003–2006: Bachelor Degree in Computer Science, Aalborg University.

2000–2003: Higher Technical Examination (HTX), Nordvestjysk Uddannelsescenter and Thisted Gymnasium og HF-kursus, Thisted.

### Work Experience

Dec. 2011 – present: Senior consultant/systems administrator, Netic A/S, Aalborg.

Jul. 2010 – Nov. 2011: Systems administrator, Telenor, Aalborg. I was in the Backoffice Applications department, where my specialities were mail, hosting, Unix, scripting, load balancing, SSL certificates, service monitoring, and general problem solving for a variety of Internet service provider and telecommunication legacy systems. I was part of a watch rota and therefore regularly on call 24/7.

Aug. 2009 – Jun. 2010: PhD student, the Distributed and Embedded Systems research unit, Department of Computer Science, Aalborg University. I did research within the topic of program analysis, specifically on methods for determining safe and tight worst-case execution times for software running on embedded hardware platforms featuring caching and pipelining. Besides research, I was a teaching assistant and supervised project groups within computer science and software engineering. Involved methods, languages and platforms: model checking, assembler code, C, Python, ARM7, ARM9.

Sep. 2007 – Jun. 2009: Student developer, Department of Mathematical Sciences, Aalborg University. I was part of a three person team doing systems administration, network administration and helping staff and students with IT related problems. The administrated equipment included 50 Ubuntu Linux workstations, 15 Ubuntu/Red Hat Linux servers and a secure, redundant Cisco network infrastructure.

May 2007 – Aug. 2007: Student developer, Google Summer of Code 2007, Google Inc. I fixed a number of complex bugs in the popular, open source, 370,000-lines-of-C-code editor Vim. Visit [gsoc.martintoft.dk](http://gsoc.martintoft.dk) for more information.

## Voluntary Work in Associations

- Sep. 2006 – Jun. 2010: Active member of F-klubben ([www.fklub.dk](http://www.fklub.dk)), the social association connecting students and employees at the computer science, mathematics and physics departments at Aalborg University. I have been in charge of the association's cult film club, have co-organized numerous parties, and have had many bar shifts.
- Apr. 2008 – Apr. 2009: Vice chairman, The Tenants' Association, C. W. Obel Kollegiet, Aalborg.
- Oct. 2004 – Nov. 2008: Systems and network administrator, C. W. Obel Kollegiet, Aalborg. I administrated a computer network shared by 200 apartments (approx 300 residents), which featured a fast Internet connection through Forskningsnettet ([www.forskningsnettet.dk](http://www.forskningsnettet.dk)).
- Oct. 3–4, 2008: Helper, Open Source Days 2008, open source conference held at the IT University of Copenhagen. Approx 1,800 day tickets sold.

## Received Awards

Together with Andreas Engelbredd Dalsgaard and Mads Christian Olesen, I received “Roblon Prisen 2009” at Aalborg University's 35th anniversary party and doctor promotion event on Nov. 3, 2009. We received the award due to the very successful project work that preceded our joint master thesis entitled “Modular Execution Time Analysis using Model Checking”. The award included 35,000 DKK for each of us.

## Publications

A. E. Dalsgaard, M. C. Olesen, M. Toft, R. R. Hansen and K. G. Larsen. *METAMOC: Modular Execution Time Analysis using Model Checking*. In Proceedings of the Tenth International Workshop on Worst-Case Execution Time Analysis (WCET), Brussels, Belgium, Jul. 2010. OCG.

A. E. Dalsgaard, M. C. Olesen, M. Toft, R. R. Hansen and K. G. Larsen. *WCET Analysis of ARM Processors using Real-Time Model Checking*. Extended abstract, SSV 2009 Doctoral Symposium, Aachen, Germany, Jun. 2009.

## Language Knowledge

Danish: Native language.

English: I speak and write English fluently and have five years of experience in writing technical reports and papers in the language.

German: I am able to understand most German but not speak it fluently.

## Programming Language Knowledge

Experienced: C, Python, PHP, Perl, Java, Ruby, shell script, assembler code.

Limited experience: C#, SML, Vim script, Scheme, Prolog, AspectJ and Eiffel.

## **Leisure Pursuits**

I enjoy many activities, including: partying with friends; running in the nature; working out in the fitness center; mountain biking; listening to music; hunting with my father, brother and my parents' dogs; cooking using the game I bring down when hunting; growing chili plants; programming open source software; watching television series on science and criminal investigations; watching classic and cult movies; reading detective novels, biographies and literature on computer science and mathematics; playing badminton; attending the event TheCamp.dk – seven open source days – every summer.

## **Miscellaneous**

I have a driving license and a hunting license. I am a non-smoker.