

# Lasse Nielsen

## Resumé

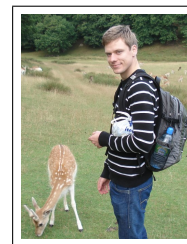
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[www.thelas.dk](http://www.thelas.dk)



*O-la-la-la-oh-la-la... That means thank you in this new language I'm inventing [Family Guy]*

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## Education

- 2008–2011 **Ph.D. student**, *Department of Computer Science*, University of Copenhagen.  
Trustworthy pervasive healthcare services
- 2004–2007 **M.Sc.**, *Department of Computer Science*, University of Copenhagen, principal subject grade 12, scale -3 to 12.
- 2001–2004 **B.Sc.**, *Department of Computer Science*, University of Copenhagen, principal subject grade 10, scale 0 to 13.
- 1997–2000 **GCSE equivalent in Mathematics**, *High School*, Stenhus Gymnasium, GPA 8.9, scale 0 to 13.

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## Achievements and awards

- 2007 **Prize Assignment Silver Medal**, University of Copenhagen.  
Silver Medal awarded for the master thesis.
- 2005 **Certified Teaching Assistant**.  
Completed the Centre for Science Education's Workshop for Teaching Assistants.

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## Experience

### Work

- 2007–2008 **Software Engineer**, *Coniuro*, Copenhagen.  
Developer of website backends
- 2005–2007 **Software Engineer**, *Renderloop*, Copenhagen.  
Developing and maintaining of software projects.
- 2003–2005 **Network Administrator**, *Grønjordskollegiet*, Copenhagen.  
Managing and developing the administration office it-systems, and maintaining the homepage

### Teaching

- 2010 **Teacher**, *Department of Computer Science*, University of Copenhagen.  
Topics in Programming Languages: Regular Expressions
- 2009 **Teaching Assistant**, *Department of Computer Science*, University of Copenhagen.  
Basics of Compiler Design
- 2008 **Teaching Assistant**, *Department of Computer Science*, University of Copenhagen.  
Linear Algebra
- 2005 **Teaching Assistant**, *Department of Computer Science*, University of Copenhagen.  
Functional Programming

### Programming

- `aπms` Language, typechecker and interpreter for an extension of the  $\pi$ -calculus used for implementing and verifying user-interfaces for cooperative workflows.  
Available at: <http://www.thelas.dk/index.php/apims>.
- `rcp` Regular expression Compression Parser is a library offering many different parsing algorithms. The library also offers Regular Expression based string compression.  
Available at: <http://www.thelas.dk/index.php/rcp>.
- `dpl` Dynamic parsing library, serves the same purpose as a parser generator without the hassle of precompilation, accepting regular expressions to define tokens, and pure BNFs for language definition.  
Available at: <http://www.thelas.dk/index.php/DynParser>.
- `sdlwidgets` GUI library build on SDL for platform independance, and designed for modularity and visual freedom.  
Available at: <http://www.thelas.dk/index.php/SdlWidgets>.
- `ucom` Instant messenger build on gloox, using `sdlwidgets` for the GUI.  
Available at: <http://www.thelas.dk/index.php/Ucom>.

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## Ph.D. study

- title *Automatic generation of user-interface logic and (re-)validation of types for dynamically changing interacting workflows.*
- project Trustcare: Trustworthy pervasive healthcare services.
- advisors Fritz Henglein and Thomas Hildebrandt
- description Trustworthy pervasive healthcare services, focussing on formalisation of Clinical Practice Guidelines, wrt. a formal semantics and verification of automated processes and user interfaces.

## Travelling

- September 2010 **Concur and Express**, Paris.  
International Conference on Concurrency Theory and  
International Workshop on Expressiveness in Concurrency
- May–October 2009 **Imperial College**, London.  
Cooperating with Nobuko Yoshida and Kohei Honda
- April 2009 **ETAPS**, York.  
The European Joint Conferences on Theory and Practice of Software

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## Master thesis

- title *A Coinductive Axiomatization of XML Subtyping*
- advisor Fritz Henglein
- description A sound and complete axiomatization of subtyping for regular XML types is created, and enables translation between type-dependent representations of data using coercions.
- prize University of Copenhagen Silver Medal
- grade 12

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## Batchelor thesis

- title *Primes is in P*
- advisor Nils Andersen
- description The result by Agrawal et. al. is verified and explained.

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## Languages

- Danish **Native Language**
- English **Second Language**
- German **Third Language**

*Swedish and Norwegian by similarity  
School and Practical Experience  
Only School Experience*