

## Resume, Taus Brock-Nannestad

---

- CONTACT INFORMATION** Taus Brock-Nannestad *Voice:* +45 2982 8250  
Ibstrupvænget 7, 1. -2 *E-mail:* tausbn@gmail.com (private)  
DK-2820 Gentofte  
DENMARK
- NATIONALITY** Danish
- RESEARCH INTERESTS** Formal proofs, Structural proof theory, Focusing, Substructural logics, Logical frameworks, Syntactic methods of reasoning, Disproving false conjectures using unsound means.
- ACADEMIC EXPERIENCE** **INRIA & LIX/École polytechnique** **2014 –**  
*Post.doc.*
- Funded by the ERC Advanced Grant *ProofCert*.
  - Presented at TABLEAUX'2015.
  - Guest lecturer on a course on Structural Proof Theory at the IT University of Copenhagen, Fall 2014.
- IT University of Denmark** **2009 – 2014**  
*PhD Student*
- Courses on Contextual Modal Type Theory, Constraint Handling Rules, Specifying and Reasoning about Computational Systems, Homotopy Type Theory.
  - Attended the Oregon Programming Languages Summer School (2011).
  - Worked with the TPTP problem library.
  - Presented at LPAR'2010, IJCAR'2012, LINEARITY'2014, Structures and Deduction'2014. Gave two DREAMtalks at the Edinburgh School of Informatics.
  - Research visitor at Carnegie-Mellon University (hosted by Professor Frank Pfenning).
  - Research visitor at Edinburgh School of Informatics (hosted by Senior Lecturer Jacques Fleuriot).
- Master Student* **2008 – 2012**
- Courses on Logic and Semantics of State, Models of Dependent Type Theory, Category Theory, Automated Theorem Proving.
- REFEREED PUBLICATIONS**
- Taus Brock-Nannestad and Kaustuv Chaudhuri. *Disproving Using the Inverse Method by Iterated Refinement of Finite Approximations*. Automated Reasoning with Analytic Tableaux and Related Methods (TABLEAUX-24, September 2015).
  - Taus Brock-Nannestad, Nicolas Guenot, and Daniel Gustafsson. *Computation in Focused Intuitionistic Logic*. Principles and Practice of Declarative Programming (PPDP 17, July 2015)
  - Taus Brock-Nannestad and Nicolas Guenot. *Focused Linear Logic and the  $\lambda$ -calculus*. Mathematical Foundations of Programming Semantics (MFPS XXXI, June 2015).
  - Taus Brock-Nannestad and Nicolas Guenot. *Cut Elimination in Multifocused Linear Logic*. International Workshop on Linearity (3rd LINEARITY, July 2014).
  - Taus Brock-Nannestad, Nicolas Guenot, Agata Murawska, and Carsten Schürmann. *Hybrid Extensions in a Logical Framework*. International Workshop on Logical Frameworks and Meta-Languages: Theory and Practice (9th LFMTP, July 2014)/.

- Taus Brock-Nannestad and Carsten Schürmann. *Truthful Monadic Abstractions*. In B. Gramlich, U. Sattler, and D. Miller, editors. *IJCAR 2012*.
- Taus Brock-Nannestad and Carsten Schürmann. *Focused Natural Deduction*. In C. Fermüller and A. Voronkov, editors, *Logic for Programming, Artificial Intelligence, and Reasoning*, volume 6397 of *Lecture Notes in Computer Science*, pages 157–171. Springer Berlin / Heidelberg, 2010.

## EDUCATION

### IT University of Denmark, Copenhagen, Denmark

- Ph.d., September 2014
  - Thesis Title: “Less is More and More is Less in Proof Structure and Proof Search”
  - Supervisor: Carsten Schürmann
  - Committee: Thore Husfeldt (chair, internal member), Dale Miller (INRIA Saclay), Roy Dyckhoff (University of St Andrews)
- Master of Science in IT, March 2012
  - Thesis Title: “On Proof Structure and Proof Search”
  - Supervisor: Carsten Schürmann
- Bachelor of Science in Mathematics, Department of Mathematics, Copenhagen University, 2008
  - Thesis Title: “The Robinson Schensted Correspondence”
  - In collaboration with student Therese Graversen.
  - Supervisor: Jørn Børling Olsson.

## PROFESSIONAL EXPERIENCE

### University of Copenhagen, Copenhagen, Denmark

*Teaching Assistant*

**2007 – 2008**

Three courses on Discrete Mathematics and Algebra.

### The Scandinavian Chemical Societies

*Software Developer*

**2007 – 2008**

Part of a three man team to scan 50 years worth of the chemical journal *Acta Chemica Scandinavica*, approximately 105,000 pages. Wrote software to automatically crop, skew, and clean-up scans. Designed and implemented the administrative (web) interface for entering and verifying title and author information. Carefully cut apart 50 years worth of bound volumes. The result of the effort is freely available at <http://www.actachemscand.org>.

## COMPUTER SKILLS

- Logic programming languages: Prolog, Twelf, λProlog.
- Functional programming languages in the ML family.
- Object-oriented programming languages (Python).
- Operating Systems: UNIX/Linux. Windows/OSX/Linux as a user.