

SHORT CURRICULUM VITAE

Chad E. Brown Programming Systems Lab Universität des Saarlandes Campus E1 3 66123 Saarbrücken	 	cebrown@mathgate.info mathgate.info/cebrown/
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Date and place of birth: Tupelo, Mississippi, June 14, 1970

Nationality: American

Education

Ph.D., Mathematics	August 2004	Carnegie Mellon University
M.S., Mathematics	May 1997	Purdue University
M.A., Mathematics	August 1994	Mississippi State University
B.S., Mathematics	December 1992	Mississippi State University

Career/Employment

Universität des Saarlandes	Wissensch. Mitarbeiter	August 2004 – present
Carnegie Mellon University	Research Assistant	September 1999 – July 2004
Universität des Saarlandes	Visiting Scientist	August 2001; August 2002
Carnegie Mellon University	Teaching Assistant	August 1997 – May 1999
Purdue University	Teaching Assistant	August 1995 – May 1997
Mississippi State University	Teaching Assistant	January 1993 – May 1994
Cypress Semiconductor	Programmer	January 1990 – March 1991

Specialization

- (i) **Main Field:** Higher-Order Theorem Proving
- (ii) **Subfields:** Semantics of Higher-Order Logic, Generalizations of Henkin Models, Extensionality Principles, Set Comprehension Principles, Cut-Elimination, Completeness and Independence Results, Automatic and Interactive Theorem Proving, Proof Checking, Proof Representations and Transformations, Categorical Semantics, Dependent Type Theory, Axiomatic Set Theory, Dependently Typed Set Theory, Mechanization of Mathematics, Mathematical Tutoring Systems
- (iii) **Current Interests:** Higher-Order Abstract Syntax, M-Sets, Tableaux, Functional Programming, Proof Carrying Code

Computing Skills

- **Extensive Experience:** Common Lisp, L^AT_EX, TPS, Twelf, Scunak
- **Moderate Experience:** OCaml, Coq, Isabelle, Mizar, JavaScript, PHP, MySQL, HTML

- **Some Experience:** Standard ML, C, Haskell, Java, PERL

Summary of Code Written

- Total Lines of Common Lisp: 62,548
- Total Lines of JavaScript: 4,702
- Total Lines of Java: 3,946
- Total Lines of OCaml: 1,337

Teaching Experience Summary

- Lectured and colectured 5 computer science courses at Saarland University, 2004-2008.
- Colectured course in Summer 2006 at ESSLLI 2006 in Malaga: Semantics of Higher-Order Logic (SEMHOL).
- Summer Course Instructor in Summer 1998 at Carnegie Mellon University for Integration, Differential Equations and Approximation.
- Instructor for eight recitations for four calculus courses at Carnegie Mellon University, 1997-1999.
- Instructor for several recitations at Purdue University for calculus and algebra courses, 1995-1997.
- Instructor for LISP Programming Lab twice, 1993-1994.
- Instructor for two tutorials at Mississippi State University for a prealgebra course, 1993-1994.

Publication Summary

- One Book: Chad E. Brown, Automated Reasoning in Higher-Order Logic: Set Comprehension and Extensionality in Church's Type Theory. Studies in Logic: Logic and Cognitive Systems, Volume 10. College Publications. (2007)
- Four journal articles
- Nine conference articles
- One workshop article
- Three articles in collections