

Curriculum Vitae

Contact Information

John Clements
Department of Computer Science
Cal Poly State University
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Education

2005 Ph.D., Northeastern University
 PhD Dissertation: *Portable and high-level access to the
 stack with Continuation Marks*
 Advisor: Matthias Felleisen

2001 M.S., Rice University
 Master's Thesis: *Modeling an Algebraic Stepper*
 Advisor: Matthias Felleisen

1996 B.A. Princeton University

1990 Interlochen Arts Academy

Professional Experience

2005– Assistant professor, Cal Poly State University

2001–2005 Graduate Student/Instructor, Northeastern University

1997–2001 Graduate Student, Rice University

1996–1997 Research Assistant, NEC Research Laboratories, Prince-
 ton, NJ

1994–1995 Researcher, Epson Palo Alto Laboratories, Palo Alto, CA

Research Interests

Programming Languages, Programming Environments,
Security, Pedagogy of Program Construction

Software Co-author, DrScheme. Author of DrScheme’s algebraic stepper. (www.plt-scheme.org)

Grants Awarded

- 2007 Lockheed Martin grant: “Test-Driven Learning: Integrating Test-Driven Development in an Early Programming Course”, co-PI
- 2006 NSF CCLI Phase 2 grant: “Redesigning the Introductory Curriculum: the Design Discipline”, co-PI
- 2006 Private Grant: “Horizon: the Cal Poly satellite simulator framework”, co-PI

Publications: Selective Conferences and Refereed Journals

- [DJC09] Chetan Desai, David Janzen, and John Clements. Implications of integrating test-driven development into cs1/cs2 curricula. In *ACM Special Interest Group on Computer Science Education, Technical Symposium*, 2009. (accepted for publication).
- [CSH08] John Clements, Ayswarya Sundaram, and David Herman. Implementing continuation marks in javascript. In *Scheme and Functional Programming Workshop*, 2008.
- [HCJ08] Michael Haungs, John Clements, and David Janzen. Improving engineering education through creativity, collaboration, and context in a first year course. In *American Society for Engineering Education Annual Conference*, 2008.
- [BC05] Eli Barzilay and John Clements. Laziness without all the hard work. In *Functional and Declarative Programming in Education*, 2005.
- [PCM⁺05] Greg Pettyjohn, John Clements, Joe Marshall, Shriram Krishnamurthi, and Matthias Felleisen. Continuations from generalized stack inspection. In *Proceedings of the International Conference on Functional Programming*, 2005.
- [CF04] John Clements and Matthias Felleisen. A tail-recursive machine with stack inspection. *ACM Transactions on Programming Languages and Systems*, 26(6):1–24, November 2004.

- [CFF⁺04] John Clements, Matthias Felleisen, Robert Findler, Matthew Flatt, and Shriram Krishnamurthi. Fostering little languages. *Dr. Dobb's Journal*, March 2004. (Invited Paper).
- [CF03] John Clements and Matthias Felleisen. A tail-recursive semantics for stack inspections. In Pierpaolo Degano, editor, *Proceedings of the 12th European Symposium on Programming*, volume 2618 of *Lecture Notes in Computer Science*, pages 22–37. Springer, 2003.
- [CFF01] John Clements, Matthew Flatt, and Matthias Felleisen. Modeling an algebraic stepper. In David Sands, editor, *Proceedings of the 10th European Symposium on Programming*, volume 2028 of *Lecture Notes in Computer Science*, pages 320–334. Springer, 2001.
- [CGKF01] John Clements, Paul Graunke, Shriram Krishnamurthi, and Matthias Felleisen. Little languages and their programming environments. In *Proceedings of the Monterey Workshop on Engineering Automation for Software Intensive System Integration*, pages 1–18, 2001.
- [RCW01] Algis Rudys, John Clements, and Dan S. Wallach. Termination in language-based systems. In *Proceedings of the Network and Distributed System Security Symposium*, 2001.
- [FCF⁺01] Robert Bruce Findler, John Clements, Cormac Flanagan, Matthew Flatt, Shriram Krishnamurthi, Paul Steckler, and Matthias Felleisen. Drscheme: A programming environment for Scheme. *Journal of Functional Programming*, 2001.

Awards and Honors

Phi Kappa Phi

Northeastern University College of Computer Science's
'Excellence in Teaching' Award, 2005

Teaching Experience

Cal Poly State University

2008, Fall	CSC 430, Programming Languages I
2008, Spring	CSC 530, Programming Languages Seminar
2008, Spring	CSC 430, Programming Languages I

2008, Winter	CSC 102, Fundamentals of Programming Languages
2007, Spring	CSC 102, Fundamentals of Programming Languages
2007, Winter	CSC 530, Programming Languages Seminar
2007, Winter	CSC 102, Fundamentals of Programming Languages
2006, Fall	CSC 102, Fundamentals of Programming Languages
2006, Spring	CSC 430, Programming Languages I (2 sections)
2006, Winter	CSC 430, Programming Languages I
2005, Fall	CSC 530, Programming Languages Seminar
2005, Fall	CPE 102, Fundamentals of Computer Science 2

Professional Service

2008, Spring	Functional and Declarative Programming in Education, Program Committee
2008, Spring	Trends in Functional Programming, Program Committee
2007, Summer	Scheme and Functional Programming, Program Committee
2007–	Course Coordinator, CSC 102
2007, Spring	Trends in Functional Programming, Program Committee
2006, Summer	Scheme and Functional Programming, Program Committee
2004, Summer	New England Programming Languages Seminar, Program Committee
2004, Spring	New England Programming Languages Seminar, Chair and Organizer
2003–2004	New England Programming Languages Seminar, Program Committee
2002	Faculty Hiring Committee Graduate representative, Northeastern University

Reviewer Theoretical Computer Science, Special Issue on Applied Semantics of Programming Languages, 2nd Applied Semantics II Workshop, European Symposium on Programming, 32nd Technical Symposium on Computer Science Education, International Conference on Functional Programming, NSF CCLI Phase I proposals 2006, Scheme and Functional Programming, Practical Aspects of Declarative Languages, Trends in Functional Programming

Invited Talks

2006 Stack Inspection for Javascript, University of California at Santa Cruz
2003 Compilers Seminar, Harvard University

References References on request.

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