Will Clinger

Professional Preparation BSMath with Highest Honors, University of Texas, 1975; PhD in Mathematics, Massachusetts Institute of Technology, 1981.

Appointments September 1994–present: Associate Professor, College of Computer Science, Northeastern University. July 2000–August 2001: Visiting Professor, Java Technology Group, Sun Microsystems Laboratories. September 1988–June 1994: Assistant Professor, University of Oregon. January 1988–August 1988: Semantic Microsystems, Beaverton, Oregon. 1985–January 1988: Principal Scientist, Tektronix Computer Research Laboratory, Beaverton, Oregon. 1981–1985: Assistant Professor, Indiana University, Bloomington, Indiana.

Publications most relevant to the proposed research Most are online at `http://www.ccs.neu.edu/home/will/papers.html`.

1. William D Clinger and Fabio V Rojas. Linear combinations of radioactive decay models for generational garbage collection. In *Science of Computer Programming*, Volume 62, Issue 2, 1 October 2006, pages 184-203.

2. David L Detlefs and William D Clinger. Eliminating write barriers for young objects. US Patent 6999980, 14 February 2006.

3. Lars T Hansen and William D Clinger. An experimental study of renewal-older-first garbage collection. In the *Proceedings of the 2002 ACM International Conference on Functional Programming*, pages 247–258, October 2002.

4. David Detlefs, Ross Knippel, William D Clinger, and Matthias Jacob. Concurrent Remembered Set Refinement in Generational Garbage Collection. In the *Proceedings of the 2002 USENIX Java VM Research and Technology Symposium*, August 2002.

5. William D Clinger and Lars Hansen. Generational garbage collection and the radioactive decay model. In the *Proceedings of the 1997 ACM Conference on Programming Language Design and Implementation*, June 1997, pages 97-108.

Other significant publications

1. Mitchell Wand and William D Clinger. Set constraints for destructive array update optimization. *Journal of Functional Programming*, 11(3), May 2001, pages 319–346.

2. William D Clinger, Anne Hartheimer, and Eric Ost. Implementation Strategies for First-Class Continuations. *Journal of Higher-Order and Symbolic Computation*, 12(1), 1999, pages 7–45.

3. Richard Kelsey, William Clinger, and Jonathan Rees [editors]. Revised^5 Report on the Algorithmic Language Scheme. *Journal of Higher-Order and Symbolic Computation*, 11(1), 1998, pages 7–105.

4. William D Clinger and Jonathan Rees. Macros that work. *Proceedings of the 1991 ACM Conference on Principles of Programming Languages*, January 1991, pages 155–162.

5. William D. Clinger. How to read floating point numbers accurately. *Proceedings of the ACM SIGPLAN '90 Conference on Programming Language Design and Implementation*, June 1990, pages 92–101. Reprinted with a short retrospective in *20 Years of the ACM SIGPLAN Conference on Programming Language Design and Implementation (1979–1999): a Selection.*

Synergistic Activities Standards: IEEE Std-1178, R5RS, R6RS, ERR5RS, and correct rounding for decimal-to-binary conversions in Java, XML Schema, and IEEE Std-754R. Software: Larceny, Petit Larceny, and Common Larceny. Education: Common Larceny, which connects Scheme to .NET, supports the Microsoft-funded Bootstrap project that uses Scheme to develop creative and rigorous thinking among high school students in Massachusetts and other states.

Collaborators and co-authors within the last 48 months Kent Dybvig (Indiana University), Matthias Felleisen (Northeastern University), Matthew Flatt (University of Utah), Lars Hansen (independent), Felix Klock (Northeastern University), Fabio Rojas (Northeastern University), Mike Sperber (deinProgramm), Anton van Straaten (AppSolutions Software Licensing), Mitch Wand (Northeastern University).

Graduate Advisors Susan Carey (MIT), Carl Hewitt (MIT)

Thesis Advisees A.V.S. Sastry (PhD, 1994); Lars Thomas Hansen (MS 1992, PhD 2000); Fabio Rojas (VMware); Felix Klock (in progress, still at Northeastern) Total Ph.D.'s supervised: 2.