

Robert L. Constable
Curriculum Vitae

February 14, 2019

PERSONAL DETAILS

- Citizenship United States
- Contacting Address Computer Science Department
Cornell University
320 Gates Hall
Ithaca, New York 14853
Tel: +01 607 255-9204
Fax: +01 607 255-4428
Email: rc@cs.cornell.edu

EDUCATION

- 1964 A.B., Princeton University, Mathematics
- 1965 M.A., University of Wisconsin, Mathematics
- 1968 Ph.D., University of Wisconsin, Mathematics
Thesis Supervisor: Stephen Cole Kleene

ACADEMIC POSITIONS

- 1999–2009 Founding Dean, Faculty of Computing and Information Science, Cornell University
- 1993–1999 Chair, Department of Computer Science, Cornell University
- 1978– Professor, Department of Computer Science, Cornell University
- 1972–1978 Associate Professor, Department of Computer Science, Cornell University
- 1968–1972 Assistant Professor, Department of Computer Science, Cornell University
- 1968–1968 Instructor, Department of Computer Science, University of Wisconsin

PROFESSIONAL ACTIVITIES

- Editorships
 - Logical Methods in Computer Science
 - The Computer Journal, Oxford University Press
 - Journal of Logic and Computation, Oxford University Press
 - Formal Methods in System Design, Kluwer Academic Publishers

- Directorships
 - Oregon Programming Languages Summer School (OPLSS) (2012 continuing)
 - NATO Summer School at Marktoberdorf (1985 - 2009)
 - PRL Research Group (1980 - present)
- Advisory Committees
 - Council of Higher Education (CHE) Israel, review committee for computer science departments (2013)
 - Johns Hopkins University, Department of Computer Science (2008 continuing)
 - University of Michigan, School of Information (2008-2012)
 - Microsoft Faculty Fellows selection committee (2005-2009)
 - Princeton University Advisory Council for Computer Science (1990-1995)
- Memberships
 - CRA IT Deans Group (formally IT Deans) (2000-2009)
 - Computing Research Association Board (CRA Board) (2004-2007) elected
 - Association for Symbolic Logic, member of ASL Council (1995-1998) elected
 - General Chair, Logic in Computer Science (LICS) (1991-1994) elected
 - ACM, SIGACT, SIGART, and SIGPLAN
- Awards
 - Herbrand Award, 2014. *“In recognition of his pioneering research in automated reasoning, including his seminal contributions to the foundations of computational type theory; the creation of Nuprl, the first constructive type theory based theorem prover; the development of the correct-by-construction programming paradigm; and their applications to verification and synthesis of computer systems, including distributed computing.”*
 - ACM Fellow, 1994
 - John Simon Guggenheim Fellowship, 1990-1991
 - Outstanding Educator Award, 1987
- Cornell University
 - Dean of the Faculty of Computing and Information Science (1999-2009)
 - Chairman of Computer Science Department (1993-1999)
 - Computing and Information Science Task Force (1999)
 - Research Initiatives Task Force (1997-1998)
 - Task Force on Mathematics (1994-1995)
 - Cognitive Studies Executive Committee (1987-1992)

– Director of Graduate Studies, Computer Science (1976-1979)

PUBLICATIONS

Books

1. *Implementing Mathematics with the Nuprl Proof Development System*, Prentice-Hall, Englewood Cliffs, NJ, 1986 (with PRL Group).
2. *An Introduction to the PL/CV2 Programming Logic*, Lecture Notes in Computer Science 135, Springer-Verlag, 1982 (with S. D. Johnson and C. D. Eichenlaub).
3. *A Programming Logic*, Winthrop, Cambridge, 1978 (with M. J. O'Donnell).

Chapters in Books (selected)

1. Polymorphic Logic. In *Logic, Construction, Computation*, editors U. Berger, H. Diener, P. Schuster, M. Seisenberger, Ontos Verlag, 2013 (with M. Bickford).
2. Russell's Orders in Kripke's Theory of Truth and Computational Type Theory. In *Handbook of the History of Logic: Sets and Extensions in the Twentieth Century*, editors D. M. Gabbay, A. Kanamori, and J. Woods, Elsevier B.V., Vol. 6, 2012, pages 801 – 845 (with F. Kamareddine and T. Laan).
3. The Triumph of Types: Principia Mathematica's Impact on Computer Science. In *Principia Mathematica Anniversary Symposium*, 2010.
4. Building Mathematics-Based Software Systems to Advance Science and Create Knowledge. In *Efficient Algorithms: Essays Dedicated to Kurt Mehlhorn on the Occasion of His 60th Birthday*, LNCS 5760, editors S. Albers, H. Alt, and S. Näher, Springer, 2009, pages 3 – 17.
5. Formal Foundations of Computer Security. In *NATO Science for Peace and Security Series - D: Information and Communication Security*, Vol. 14, 2008, pages 29 – 52 (with M. Bickford).
6. Recent Results in Type Theory and Their Relationship to Automath. In *Thirty Five Years of Automating Mathematics*, editor F. Kamareddine, Kluwer, Amsterdam, 2003, pages 37 – 48.
7. Naive Computational Type Theory. In *Proof and System-Reliability*, editors H. Schwichtenberg and R. Steinbrueggen, NATO Science Series III, International Summer School Marktoberdorf, Kluwer, Amsterdam, 2002, pages 213 – 260.
8. Computational Complexity and Induction for Partial Computable Functions in Type Theory. In *Reflections on the Foundations of Mathematics: Essays in Honor of Solomon Feferman*, editors W. Sieg, R. Sommer, and C. Talcott, Association for Symbolic Logic, 2001, pages 166 – 183 (with K. Cray).
9. Nuprl's Class Theory and its Applications. In *Foundations of Secure Computation*, editors F. L. Bauer and R. Steinbrueggen, NATO Science Series F, IOS Press, Amsterdam, 2000, pages 91 – 116.

10. Constructively Formalizing Automata. In *Proof Language and Interaction: Essays in Honour of Robin Milner*, MIT Press, Cambridge, 2000, pages 213 – 238 (with P. B. Jackson, P. Naumov, and J. Uribe).
11. Formalizing Decidability Theorems about Automata. In *Computational Logic*, editors U. Berger and H. Schwichtenberg, NATO ASI Series, Springer, Vol. 165, 1999, pages 179 – 213.
12. Types in Logic, Mathematics and Programming. In *Handbook of Proof Theory*, editor S. R. Buss, Elsevier Science B.V., 1998, pages 683 – 786.
13. The Structure of Nuprl’s Type Theory. In *Logic and Computation*, NATO ASI Series, Springer-Verlag, 1996, pages 123 – 156.
14. Using Reflection to Explain and Enhance Type Theory. In *Proof and Computation*, NATO ASI Series, Springer-Verlag, 1994, pages 65 – 100.
15. Metalogical Frameworks. In *Logical Environments*, editors G. Huet and G. Plotkin, Cambridge University Press, 1993, pages 1 – 29 (with D. A. Basin).
16. Lectures on: Classical Proofs as Programs. In *Logic and Algebra of Specification*, editors F. L. Bauer, W. Brauer, and H. Schwichtenberg, Springer, 1993, pages 31 – 61.
17. Metalevel Programming in Constructive Type Theory. In *Programming and Mathematical Method*, NATO ASI Series, Vol. F88, Springer-Verlag, 1992, pages 45 – 93.
18. Formal Theories and Software Systems: Fundamental Connections between Computer Science and Logic. In *Future Tendencies in Computer Science, Control and Applied Mathematics, Lecture Notes in Computer Science 653*, Springer-Verlag, 1992, pages 105 – 127.
19. Reflecting the Open-ended Computation System of Type Theory. In *Logic, Algebra, and Computation*, editor F. L. Bauer, Springer, 1991, pages 265 – 280 (with D. Howe and S. F. Allen).
20. Nuprl as a General Logic. In *Logics for Computer Science*, Academic Press, 1990, pages 77 – 90 (with D. Howe).
21. Implementing Metamathematics as an Approach to Automatic Theorem Proving. In *A Source Book of Formal Approaches in Artificial Intelligence*, North-Holland, 1990, pages 45 – 75 (with D. Howe).
22. Assigning Meaning to Proofs: A Semantic Basis for Problem Solving Environments. In *Constructive Methods in Computing Science*, editor M. Broy, NATO ASI Series, Vol. F55, Springer-Verlag, 1989, pages 63 – 91.
23. Themes in the Development of Programming Logics Circa 1963 – 1987. In *Annual Review of Computer Science*, Vol. 3, 1988, pages 147 – 165.
24. The Role of Finite Automata in the Development of Modern Computing Theory. In *Proceedings of the Kleene Symposium*, North-Holland, 1980, pages 59 – 81.
25. A Discussion of Program Verification. In *Proceedings of the Conference on Research Directions in Software Technology*, editor P. Wegner, MIT Press, Cambridge, 1979, pages 393 – 403.

Journal Articles (selected relevant to current research)

1. Bar Induction is Compatible with Constructive Type Theory. *Journal of the ACM (JACM)*, 2019 (with V. Rahli, L. Cohen, and M. Bickford): to appear.
2. Implementing Euclid’s Straightedge and Compass Constructions in Type Theory. In *Annals of Mathematics and Artificial Intelligence*, 2018 (with A. Kellison and M. Bickford).
3. Intuitionistic Ancestral Logic. In *Journal of Logic and Computation: exv073v1-exv073*, October 2015 (with Liron Cohen).
4. Intuitionistic Completeness of First-Order Logic. In *Annals of Pure and Applied Logic*, Elsevier B.V., Vol. 165, Issue 1, 2014, pages 164 – 198 (with M. Bickford).
5. Knowledge-Based Synthesis of Distributed Systems Using Event Structures. In *Logical Methods in Computer Science*, Vol. 7, Issue 2, 2011 (with M. Bickford, J. Halpern, and S. Petride).
6. Extracting Programs from Constructive HOL Proofs via IZF Set - Theoretic Semantics. In *Logical Methods in Computer Science*, Vol. 4, Issue 3, 2008 (with W. Moczydowski).
7. Transforming the Academy: Knowledge Formation in the Age of Digital Information. In *PhysicaPlus*, 9, January, 2007.
8. Innovations in Computational Type Theory using Nuprl. In *Journal of Applied Logic*, Elsevier Science, Vol. 4, Issue 4, 2006, pages 428 – 469 (with S. Allen, M. Bickford, R. Eaton, C. Kreitz, L. Lorigo, and E. Moran).
9. Using Formal Reference to Enhance Authority and Integrity in Online Mathematical Texts. In *Journal of Electronic Publishing*, Vol. 9, No. 2, 2006 (with L. Lorigo and S. Allen).
10. The Future of Departments. In *Academic Leader*, 19, 2003, pages 1 – 12 (with G. C. Altschuler).
11. The Horus and Ensemble Projects: Accomplishments and Limitations. In *DARPA Information Survivability Conference and Exposition (DISCEX 2000)*, Vol. I, 2000, pages 149 – 161 (with K. Birman, M. Hayden, J. Hickey, C. Kreitz, R. van Renesse, O. Rodeh, and W. Vogels).
12. Metalogical Frameworks II: Developing a Reflected Decision Procedure. In *Journal of Automated Reasoning*, Vol. 22(2), 1999, pages 171 – 221 (with W. E. Aitken and J. L. Underwood).
13. A Note on Complexity Measures for Inductive Classes in Constructive Type Theory. In *Information and Computation*, Vol. 143(2), 1998, pages 137 – 153.
14. Computational Foundations of Basic Recursive Function Theory. In *Theoretical Computer Science B: Logic, Semantics, and Theory of Programming*, Vol. 120, 1993, pages 89 – 112 (with S. F. Smith).
15. On Writing Programs that Construct Proofs. In *Journal of Automated Reasoning*, Vol. 1, 1985, pages 285 – 326 (with T. Knoblock and J. Bates).

16. Proofs as Programs. In *Transactions on Programming Languages and Systems*, Vol. 7(1), 1985, pages 113 – 136.
17. Remembrances of Errett Bishop. In *Contemporary Mathematics*, American Mathematical Society, Vol. 39, 1985, pages 79 – 84 (with A. Nerode and G. Metakides).
18. Constructive Mathematics as a Programming Logic I: Some Principles of Theory. In *Foundations of Computing Theory, Lecture Notes in Computer Science* 158, Springer-Verlag, NY, 1983, pages 64 – 77; also *Annals of Discrete Mathematics*, Vol. 24, 1985, pages 21 – 38.
19. The Type Theory of PL/CV3. In *Logics of Programs, Lecture Notes in Computer Science* 135, Springer-Verlag, 1982, pages 72 – 93 (with D. Zlatin); also in *Transactions on Programming Languages and Systems*, Vol. 6(1), 1984, pages 94 – 117.
20. Programs as Proofs. In *Information Processing Letters*, Vol. 16(3), 1983, pages 105 – 112.
21. A Hierarchical Approach to Formal Semantics with Application to the Definition of PL/CS. In *Transactions on Programming Languages and Systems*, Vol. 1(1), 1979, pages 98 – 114 (with J. Donahue).
22. On Computational Complexity of Scheme Equivalence. In *Proceedings of the Eighth Princeton Conference on Information Sciences and Systems*, 1974; also *SICOMP*, Vol. 9(2), 1980, pages 396 – 416 (with H. Hunt and S. Sahni).
23. A Constructive Programming Logic. In *Proceedings of the World Computer Congress of the IFIP 77*, 1977, pages 733 – 738.
24. Computability Concepts for Programming Language Semantics. In *Proceedings of the Seventh ACM Symposium on the Theory of Computing*, 1975, pages 98 – 105; also *Theoretical Computer Science* 2, 1976, pages 133 – 145 (with H. Egli).
25. Two Types of Hierarchy Theorem for Axiomatic Complexity Classes. In *Courant Computer Science Symposium 7, Computational Complexity*, Algorithmic Press, NY, 1973, pages 733 – 738.
26. The Operator Gap. In *Proceedings of the Ninth IEEE Symposium on Switching and Automata Theory*, 1969, pages 20 – 26 (expanded in *Journal of the ACM*, Vol. 19(1), 1972, pages 175 – 183).
27. On the Efficiency of Programs in Subrecursive Formalisms. In *Proceedings of the Tenth IEEE Symposium on Switching and Automata Theory*, 1972, pages 60 – 67; also as Subrecursive Programming Languages I; also, in *Journal of the ACM*, Vol. 19(3), 1972, pages 526 – 586 (with A. Borodin).
28. On Classes of Program Schemata. In *SIAM Journal of Computing*, Vol. 1(1), 1972, pages 66 – 118 (with D. Gries).
29. Subrecursive Program Schemata I Undecidable Equivalence Problems. In *Proceedings of the Fourth Symposium on the Theory of Computing*, 1972; also *Journal of Computer and System Sciences*, Vol. 6(6), 1972, pages 480 – 518 (with S. Muchnick).

30. Constructive Mathematics and Automatic Program Writers. In *Proceedings of the World Computer Congress of the IFIP*, 1971, pages 229 – 233.

Scholarpedia article

1. Computational Type Theory. Scholarpedia, 4(2):7618, 2009. (15,000 visits)

Conference Proceedings (selected)

1. Computability Beyond Church-Turing using Choice Sequences. In *Proceedings of the 33rd Annual ACM/IEEE Symposium on Logic in Computer Science (LICS)*, Oxford, UK, 2018, pages 245–254 (with Vincent Rahli, Liron Cohen, and Mark Bickford).
2. Bar Induction: The Good, the Bad, and the Ugly. In *32nd Annual ACM/IEEE Symposium on Logic in Computer Science (LICS)*, Reykjavik, Iceland, 2017, pages 1–12 (with Mark Bickford and Vincent Rahli).
3. Formal Specification, Verification, and Implementation of Fault-Tolerant Systems Using EventML. In *Proceedings of the 15th International Workshop on Automated Verification of Critical Systems (AVoCS 2015)*, Edinburgh, Scotland, 2015 (with V. Rahli, D. Guaspari, and M. Bickford).
4. Nuprl’s Inductive Logical Forms. In the *6th International Workshop on the use of AI in Formal Methods (AI4FM)*, Edinburgh, Scotland, 2015 (with M. Bickford, R. Eaton, and V. Rahli).
5. Developing Correctly Replicated Databases Using Formal Tools. In the *44th Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN)*, Atlanta, GA, 2014 (with N. Schiper, V. Rahli, R. van Renesse, and M. Bickford).
6. A Type Theory with Partial Equivalence Relations as Types. In *TYPES 2014: Types for Proofs and Programs*, Paris, France, 2014 (with A. Anand, M. Bickford, and V. Rahli).
7. Inductive Construction in Nuprl Type Theory Using Bar Induction. In *TYPES 2014: Types for Proofs and Programs*, Paris, France, 2014 (with M. Bickford).
8. A Diversified and Correct-by-Construction Broadcast Service. Presented at the *2nd International Workshop on Rigorous Protocol Engineering (WRiPE)*, Austin, TX, 2012 (with V. Rahli, N. Schiper, R. van Renesse, and M. Bickford).
9. ShadowDB: A Replicated Database on a Synthesized Consensus Core. Presented at the *8th Workshop on Hot Topics in System Dependability (HotDep)*, Hollywood, CA, 2012 (with N. Schiper, V. Rahli, R. van Renesse, and M. Bickford).
10. On Building Constructive Formal Theories of Computation Noting the Roles of Turing, Church, and Brouwer. In *Proceedings of the 27th Annual ACM/IEEE Symposium on Logic In Computer Science (LICS)*, Dubrovnik, Croatia, 2012.
11. Proof Assistants and the Dynamic Nature of Formal Theories. In *Proceedings of the Second International Workshop on Proof Exchange for Theorem Proving*, editors D. Pichardie and T. Weber, Manchester, UK, 2012, pages 1 – 15.

12. The Logic of Events, a Framework to Reason about Distributed Systems. Presented at the *2012 Languages for Distributed Algorithms (LADA) Workshop*, Philadelphia, PA, 2012 (with M. Bickford and V. Rahli).
13. Investigating Correct-by-Construction Attack-Tolerant Systems. In *Proceedings of the Workshop on Survivability in Cyberspace*, Stockholm, 2010 (with M. Bickford and R. van Renesse).
14. Extracting the Resolution Algorithm from a Completeness Proof for the Propositional Calculus. In *Proceedings of the Symposium on Logical Foundations of Computer Science*, 2007 (with W. Moczydlowski).
15. Extracting Programs from Constructive HOL Proofs via IZF Set-Theoretic Semantics. In *Proceedings of the 3rd International Joint Conference on Automated Reasoning (IJCAR 2006)*, LNCS 4130, 162 – 176, Springer. Invited to the special issue of *Logical Methods in Computer Science* (with W. Moczydlowski).
16. A Graph-Based Approach Towards Discerning Inherent Structures in a Digital Library of Formal Mathematics. In *International Conference on Mathematical Knowledge Management, Lecture Notes in Computer Science*, editors A. Asperti, G. Bancerek, and A. Trybulec, Springer-Verlag, 2004, pages 220 – 235 (with L. Lorigo, J. Kleinberg, and R. Eaton).
17. Knowledge-Based Synthesis of Distributed Systems Using Event Structures. In *Logic for Programming, Artificial Intelligence, and Reasoning*, 11th International Conference, LPAR 2004, Springer, 2005, pages 449 – 465 (with M. Bickford, J. Halpern, and S. Petride).
18. An Experiment in Formal Design Using Meta-Properties. In *DARPA Information Survivability Conference and Exposition II (DISCEX 01)*, Vol. II, IEEE Computer Society Press, 2001, pages 100 – 107 (with M. Bickford, C. Kreitz, and R. van Renesse).
19. The Nuprl Open Logical Environment. In *17th International Conference on Automated Deduction*, editor D. McAllester, Springer-Verlag, 2000, pages 170 – 176 (with S. Allen, R. Eaton, C. Kreitz, and L. Lorigo).
20. Building Reliable, High-Performance Communication Systems from Components. In *Proceedings of the 17th ACM Symposium on Operating System Principles*, 1999, pages 80 – 92 (with X. Liu, C. Kreitz, R. van Renesse, J. Hickey, M. Hayden, and K. Birman).
21. Verbalization of High-Level Formal Proofs. In *Sixteenth National Conference on Artificial Intelligence*, 1999, pages 277 – 284 (with R. Barzilay and A. Holland-Minkley).
22. Creating and Evaluating Interactive Formal Courseware for Mathematics and Computing. In *Frontiers in Education*, IEEE, editors M. F. Iskander, M. J. Gonzalez, G. L. Engel, C. K. Rushforth, M. A. Yoder, R. W. Grow, and C. H. Durney, Vol. 1, pages 420 – 423, 1996.
23. Experience Using Type Theory as a Foundation for Computer Science. In *Proceedings of the Tenth Symposium on Logic in Computer Science*, IEEE, 1995, pages 266 – 279.
24. Meta-Logical Frameworks. In *Proceedings of the Second Workshop on Logical Frameworks*, Edinburgh, UK, 1991 (with D. Basin).

25. Extracting Computational Content from Classical Proofs. In *Proceedings of the First Annual BRA Workshop on Logical Frameworks*, Sophia-Antipolis, France, 1990, pages 141 – 156.
26. The Semantics of Reflected Proof. In *Proceedings of the Fourth Symposium on Logic in Computer Science*, IEEE, May 1990, pages 95 – 105 (with D. Howe, S. Allen, and W. Aitken).
27. Computational Foundations of Basic Recursive Function Theory. In *Proceedings of the Third Symposium on Logic in Computer Science*, IEEE, May 1988, pages 360 – 371 (with S. Smith).
28. Partial Objects in Constructive Type Theory. In *Proceedings of the Third Symposium on Logic in Computer Science*, May 1988, pages 183 – 193.
29. Infinite Objects in Type Theory. In *Proceedings of the Symposium on Logic in Computer Science*, IEEE, Computer Science Press, Washington, DC, 1986, pages 249 – 257 (with N. P. Mendler and P. Panangaden).
30. Formalized Metareasoning in Type Theory. In *Proceedings of the Symposium on Logic in Computer Science*, IEEE, Computer Society Press, Washington, DC, 1986, pages 237 – 248 (with T. Knoblock).
31. Recursive Definitions in Type Theory. In *Logics of Programs, Lecture Notes in Computer Science* 193, editor R. Parikh, Springer-Verlag, NY, 1985, pages 61 – 78 (with N. P. Mendler).
32. Mathematics as Programming. In *Proceedings of the Workshop on Programming Logics, Lecture Notes in Computer Science* 164, Springer-Verlag, 1983, pages 116 – 128.
33. Partial Functions in Constructive Formal Theories. In *Proceedings of the Sixth G. I. Conference, Lectures Notes in Computer Science* 145, 1983, pages 1 – 18.
34. Programs and Types. *Proceedings of the 21st IEEE Symposium on the Foundations of Computer Science*, 1980, pages 118 – 128.
35. A PL/CV precis. In *Proceedings of the ACM Symposium on the Principles of Programming Languages*, 1979, pages 7 – 20 (with S. Johnson).
36. On the Theory of Programming Logics. In *Proceedings of the Ninth ACM Symposium on the Theory of Computing*, 1977, pages 269 – 285.

Technical Reports (not fully published elsewhere)

1. Generating Event Logics with Higher-Order Processes as Realizers, Computing and Information Science Technical Reports, Cornell University, 2011, <http://hdl.handle.net/1813/23562> (with M. Bickford and D. Guaspari).
2. Effectively Nonblocking Consensus Procedures Can Execute Forever - a Constructive Version of FLP, Cornell University Tech Report Ref Number 11512, 2008.
3. The Fundamental Theorem of Arithmetic in PL/CV2. TR 80-424, Department of Computer Science, Cornell University, 1980.
4. Language Features that Support Program Verification (illustrated by PL/C). TR 76 - 276, Department of Computer Science, Cornell University, 1976.

5. PL/CS, a Disciplined Subset of PL/C. TR 76 - 273, Department of Computer Science, Cornell University, 1976 (with R. Conway).

Other Publications

1. Users Guide for the PL/CV Program Verifier. Department of Computer Science, Cornell University (with M. O'Donnell, S. Johnson, and C. Hauser).
2. PL/CV Program Verifier Reference Manual. Department of Computer Science, Cornell University (with S. Johnson).
3. Formalizing Metamathematics in Type Theory. University of Edinburgh Computer Science Notes, Edinburgh.

PH. D. STUDENTS ADVISED

1969 – Allan B. Borodin	1970 – Forbes D. Lewis
1972 – Robert V. Harris	1972 – John C. Cherniavsky
1973 – Stephen S. Muchnick	1974 – Kurt Mehlhorn
1976 – Michael J. O'Donnell	1976 – Edmund M. Clarke, Jr.
1979 – Joseph L. Bates	1980 – Carl Hauser
1980 – Tat-Hung Chan	1981 – Scott D. Johnson
1981 – John P. Privitera	1982 – Dean B. Krafft
1985 – Ryan D. Stansifer	1985 – Robert W. Harper
1986 – James T. Sasaki	1987 – W. Rance Cleaveland
1987 – Todd B. Knoblock	1987 – N. P. Mendler
1987 – Stuart F. Allen	1987 – Douglas J. Howe
1988 – Timothy G. Griffin	1988 – Scott F. Smith
1990 – Chetan Murthy	1990 – David Basin
1994 – Wilfred Chen	1994 – Judith Underwood
1995 – Paul Jackson	1997 – Rod Moten
1998 – Mark Hayden	1998 – James L. Caldwell
1998 – Pavel Naumov	1998 – Karl Crary
2001 – Ozan Hafizogullari (MS)	2001 – Jason Hickey (CalTech)
2002 – Ralph Benzinger (SAP)	2002 – Aleksey Nogin (CalTech)
2004 – Alexei Kopylov (CalTech)	2004 – Amanda Holland-Minkley
2006 – Eli Barzilay	2006 – Lori Lorigo
2007 – Wojciech Moczydlowski	2016 – Abhishek Anand