

# CURRICULUM VITAE

Vaughan R. Pratt

March 2, 2015

## Education:

B.Sc.(hons), April 1967	University of Sydney, Australia
M.Sc., June 1970	University of Sydney, Australia
Ph.D., January 1972	Stanford University
Ph.D. Thesis Title:	Shellsort and Sorting Networks
Ph.D. Advisor:	Donald Knuth

## Professional Societies:

Association for Computing Machinery (Fellow)  
Institute for Electrical and Electronic Engineering (Senior Member)  
American Geophysical Union (Life Member)  
American Meteorological Society  
American Mathematical Society  
Mathematical Association of America  
Editorial Board, Applied Categorical Structures (Kluwer Academic Press)  
Editorial Board, AMAST Series in Computing (World Scientific)

## Invited Speaker at Conferences and Workshops:

Conference on Combinatorial Algorithms, Monterey, CA, 1971  
Workshop on Algorithms, Oberwolfach, Germany, 1976  
CWI Summer School, Amsterdam, NL, July 1978.  
6th International Congress on Logic, Philosophy, and Methodology of Science, Hanover, Germany, August 1979.  
MFCS'79–6th Symposium on Mathematical Foundations of Computer Science, Olomouc, Czechoslovakia, August 1979  
ANZAAS–51st Congress, Australian and New Zealand Association for the Advancement of Science, Brisbane, Australia, May 1981 (President of Computing Section)  
Information Technology Search '88, Leura, NSW, Australia, February 1988.

GMD Workshop on Combining Compositionality and Concurrency, Königswinter, Germany, March 1988.  
 Algebraic Logic and Universal Algebra in Theoretical Computer Science, Ames, Iowa, June 1988.  
 The Jonsson Symposium, Laugarvatn, Iceland, July 1990  
 MFCS'90—Mathematical Foundations of Computer Science, Banska Bystrica, Czechoslovakia, August 1990  
 JELIA'90—European Workshop on Logics in AI, Amsterdam, NL, September 1990  
 AMAST'91—2nd International Conference on Algebraic Methodology and Software Technology, Iowa City, IA, May 1991  
 Symposium honoring Boris Trakhtenbrot's 65th birthday, Tel Aviv, Israel, June 1991  
 CLICS Workshop, Aarhus, Denmark, March 1992  
 LATIN'92—International Symposium Latin American Theoretical Informatics, Sao Paulo, Brazil, April 1992  
 MAIS Workshop, Cosener's House, Abingdon, England, April 1992  
 [Quintuple bypass surgery, May 1992; obliged to cancel an invited talk at a CWI symposium that month]  
 LICS'92—Logic in Computer Science, Santa Cruz, CA, June 1992  
 Logic at Tver—Symposium on Logical Foundations of Computer Science, Tver, Russia, July 1992  
 CONCUR'92—Third International Conference on Concurrency Theory, Stonybrook, NY, August 1992  
 CMU CS Distinguished Lecturer Series, Pittsburgh, PA, October 1992.  
 International Workshop on Models for High-Performance Computing, Warsaw, Poland, May 1993  
 Linear Logic Workshop, Math. Sciences Institute, Ithaca, NY, June 1993.  
 MFCS'93—18th Symp. on Math. Found. of CS, Gdansk, Poland, September 1993  
 Binary Relations Workshop, Dagstuhl, Germany, Jan. 1994  
 Concurrency Workshop, Rennes, France, April 1994.  
 Association for Symbolic Logic meeting, (panel), Kansas City, May 1994.  
 Logic, Language, and Information Workshop, CSLI, Stanford, CA, June 1994.  
 Conference on Situation Theory and Applications, Moraga, CA, June 1994.  
 TEMPUS Summer School (5 lectures), Budapest, Hungary, July 1994.  
 NSF Workshop on Formal Methods in CS, Hamilton, NY, July 1994.  
 Conf. on Theory and Practice of Parallel Programming, Sendai, Japan, November 1994.  
 Conf. on Theory and Practice of Software (TAPSOFT'95) (two invited talks), Aarhus, Denmark, May 1995  
 Workshop on Logic and Language in Computation, Recife, Brazil, July 1995  
 Workshop on Games, Processes and Logic, Cambridge, UK, Nov. 1995  
 Workshop on New Connections between Mathematics and Computer Science, Cambridge, UK, Nov. 1995  
 Linear Logic 96, Tokyo, Japan, March 1996

Workshop on Algebra, Logic, and Geometry in Informatics, Tokyo, Japan, April 1996  
 Conference on Modern Algebra and its Applications, Nashville, TN, May 1996  
 Distinguished Lecturer, DIMACS, Piscataway, NJ, July 1996  
 Foundations of Software Technology and Theoretical Computer Science, Hyderabad, India, December 1996  
 Fourth Workshop on Expressiveness in Concurrency, Santa Margherita, Italy, September 1997  
 Linear Logic Workshop, Utrecht, NL, November 1997  
 Monterey Workshop on Formal Methods, Carmel, CA, October 1998  
 23rd Holiday Mathematics Symposium, Las Cruces, NM, January 1999  
 Geometric and Topological Methods in Concurrency Theory, Aalborg, Denmark, June 1999  
 School on Category Theory and Applications (5 lectures), Coimbra, Portugal, July 1999  
 Embedded Systems Conference, San Jose, CA, September 1999  
 Distinguished Lecturer, CS Dept., UIUC, IL, January 2000  
 Asilomar Microcomputer Workshop, Asilomar, CA, April 2000  
 Conference on Language, Logic, and Logistics: Modeling and Cross-Disciplinary Discourse, NMSU, NM, January 2001  
 ELEC: Embedded Linux Expo and Conference (keynote speaker), San Jose, CA, June 2001  
 WAIS Conference on Globalization and its Discontents, Stanford, CA, July 2001  
 Conference on Algebraic Topological Methods in Computer Science, Stanford, CA, August 2001  
 IJCAI01 Workshop on Spatial and Temporal Reasoning, Seattle, WA, August 2001  
 Software Seminar (SOSFEM 2001) (keynote speaker), Bratislava, Slovakia, November 2001  
 Knuth's Millionth (base 2) Birthday Symposium, Stanford, CA, January 2002  
 CONCUR'02–Thirteenth International Conference on Concurrency Theory (keynote speaker), Brno, Slovakia, August 2002  
 CMCS'03–Coalgebraic Methods in Computer Science, Warsaw, April 2003  
 Joint Mathematics Meeting, Phoenix, AZ, January 2004  
 MFPS XXIII–Mathematical Foundations of Program Semantics, New Orleans, April 2007  
 Espaces de Chu et musique (Séminaire MaMuX, keynote speaker), Paris, France, April 2010  
 International Conference on Distributed Computing and Internet Technology, Bhubaneswar, India, February 2011  
 Sergey Artemov's 60th birthday symposium, New York, May 2012

## Publications:

Blum, M., R. Floyd, V.R. Pratt, R.L. Rivest, and R.E. Tarjan, "Linear Time Bounds for Median Computations", Proc. 4th Annual ACM Symposium on Theory of Computation, 119-124, 1972.

Pratt, V.R., "An  $n \log n$  Algorithm to Distribute  $n$  Records Optimally in a Sequential Access File", in Complexity of Computer Computations, (ed. Miller, R., and J. Thatcher), 111-118, Plenum Press, N.Y., 1972.

Pratt, V.R., "Computing Permutations with Double-Ended Queues, Parallel Stacks and Parallel Queues", Proc. 5th Annual ACM Symposium on Theory of Computation, 268-277, 1973.

Pratt, V.R., "A Linguistics Oriented Programming Language", 3rd International Joint Conference on Artificial Intelligence, 372-382, 1973.

Pratt, V.R., "A Least Upper Bound on Conventional Shellsort", in Combinatorial Algorithms, (ed. Rustin, R.), 31-38, Algorithmics Press, N.Y., 1973.

Pratt, V.R., "Top Down Operator Precedence", Proc. ACM Symposium on Principles of Programming Languages, 41-51, Oct. 1973.

Pratt, V.R., and F.F. Yao, "On Lower Bounds for Computing the  $i$ th Largest Element", Proc. 14th Annual IEEE Symposium on Switching and Automata Theory, 70-81, Oct. 1973.

Blum, M., R. Floyd, V.R. Pratt, R.L. Rivest, and R.E. Tarjan, "Time Bounds for Selection", JCSS 7:4, 448-461, 1973.

Pratt, V.R., "A combinatorial analysis of the average time for open-address hash coding insertion", <http://arXiv.org/abs/1208.5956>, 1974

Pratt, V.R., "The Power of Negative Thinking in Multiplying Boolean Matrices", Proc. 6th Annual ACM Symposium on Theory of Computation, 80-83, 1974.

Pratt, V.R., M.O. Rabin, and L.J. Stockmeyer, "A Characterization of the Power of Vector Machines", Proc. 6th Annual ACM Symposium on Theory of Computation, 122-134, 1974.

Pratt, V.R., "Every Prime has a Succinct Certificate", SIAM Journal on Computing, 4:3, 214-220, 1975.

Pratt, V.R., "LINGOL - A Progress Report", Proc. 4th International Joint Conference on Artificial Intelligence, 422-428, Tbilisi, USSR, 1975.

Pratt, V.R., "The Power of Negative Thinking in Multiplying Boolean Matrices", SIAM Journal on Computing, 4:3, 326-330, 1975.

Pratt, V.R., "The Effect of Basis on the Size of Boolean Expressions", Proc. 16th Annual IEEE Symposium on Foundations of Computer Science, 1975, 119-121.

Pratt, V.R., and L.J. Stockmeyer, "A Characterization of the Power of Vector Machines", *JCSS*, 12, 2, 1976, 198-221.

Rivest, R.L., and V.R. Pratt, "The Mutual Exclusion Problem for Unreliable Processes", *Proc. 17th Annual IEEE Symposium on Foundations of Computer Science*, 1-8, 1976.

Pratt, V.R., "Semantical Considerations on Floyd-Hoare Logic", *Proc. 17th Annual IEEE Symposium on Foundations of Computer Science*, 1976, 109-121.

Pratt, V.R., "The Competence/Performance Dichotomy in Programming", *Proc. 4th Annual ACM Symposium on Principles of Programming Languages*, 1976, 194-200.

Harel, D., A.R. Meyer, and V.R. Pratt, "Computability and Completeness in Logics of Programs", *Proc. 9th Annual ACM Symposium on Theory of Computation*, 1977, 261-268.

Knuth, D.E., J.H. Morris, and V.R. Pratt, "Fast Pattern Matching in Strings", *SIAM Journal on Computing*, 6, 2, 1977, 323-350.

Litvintchouk, S.D., and V.R. Pratt, "A Proof Checker for Dynamic Logic", *5th International Joint Conference on Artificial Intelligence*, August 1977, 552-558.

Harel, D., and V.R. Pratt, "Nondeterminism in Logics of Programs", *Proc. 5th Annual ACM Symposium on Principles of Programming Languages*, January 1978, 203-213.

Pratt, V.R., "A Practical Decision Method for Propositional Dynamic Logic", *Proc. 10th Ann. ACM Symp. on Theory of Computing*, Calif., May 1978, 326-337.

Pratt, V.R., "LISP", in *Encyclopedia of Computer Sciences and Technology*, 10, (eds. Belzer, J., A. Holzmann and A. Kent), Marcel Dekker, New York, 1978, 78-116.

Pratt, V.R., "Process Logic", *Proc. 6th Ann. ACM Symp. on Principles of Programming Languages*, Jan. 1979, 93-100.

Pratt, V.R., "Dynamic Logic", *Proc. 6th International Congress on Logic, Philosophy, and Methodology of Science*, August 1979.

Pratt, V.R., *Shellsort and Sorting Networks*, Garland Publishing, Inc., New York, 1979.

Pratt, V.R., "LISP - A Mathematician's View", *Byte magazine*, 162-168, August, 1979.

Pratt, V. R., "Axioms or Algorithms", *Proc. 6th Symposium on Mathematical Foundations of Computer Science*, 160-169, Sept., 1979.

Pratt, V.R., "Models of Program Logics", *Proc. 20th IEEE Conference on Foundations of Computer Science*, 115-122, October, 1979.

Pratt, V.R., “On Specifying Verifiers”, Proc. 7th Ann. ACM Symposium on Principles of Programming Languages, January, 1980.

Pratt, V.R., “A Near-Optimal Method for Reasoning About Actions”, JCSS, 20:2, 231-254, April, 1980.

Pratt, V.R., “Dynamic Algebras and the Nature of Induction”, Proc. 12th ACM Symposium on Theory of Computing, 22-28, May 1980.

Pratt, V.R., Six Lectures on Dynamic Logic, Foundations of Computer Science III, Part 2, 53-82, Mathematical Centre Tracts 109, Amsterdam, 1980.

Pratt, V.R., “Application of Modal Logic to Programming”, Studia Logica, 34, 2/3, 257-274, 1980.

Pratt, V.R., “Program Logic Without Binding is Decidable”, Proc. 8th Ann. ACM Symposium on Principles of Programming Languages, 159-163, January, 1981.

Rodeh, M., V.R. Pratt, and S. Even, “Linear Algorithm for Data Compression via String Matching”, JACM, 28:1, 16-24, 1981.

Pratt, V.R., “Using Graphs to Understand PDL”, Proc. IBM Conf. on Logics of Programs, 387-396, LNCS 131, Springer-Verlag, May, 1981.

Pratt, V.R., “A Decidable  $\mu$ -Calculus”, Proc. 22nd IEEE Conference on Foundations of Computer Science, 421-427, October, 1981.

Pratt, V.R., “On the Composition of Processes”, Proc. 9th Ann. ACM Symposium on Principles of Programming Languages, January, 1982.

Pratt, V.R., “Five Paradigm Shifts in Programming Language Design and their Realization in the Programming Language Viron,” Proc. 10th Ann. ACM Symposium on Principles of Programming Languages, January, 1983.

Pratt, V.R., “Standards and Performance Issues in the Workstation Market,” Computer Graphics and Applications, 4:4, 71-76, April, 1984.

Pratt, V.R., “The Pomset Model of Parallel Processes: Unifying the Temporal and the Spatial”, Proc. CMU/SERC Workshop on Analysis of Concurrency, 180-196, Springer-Verlag Lecture Notes in Computer Science LNCS 196, Pittsburgh, 1984.

Pratt, V.R., “Two-Way Channel with Disconnect”, in section 3.1.3 of Denvir, T., W. Harwood, M. Jackson, and M. Ray, The Analysis of Concurrent Systems, 110-111, LNCS 207, Springer-Verlag, 1985.

Pratt, V.R., “Techniques for Conic Splines”, Computer Graphics 19, 3, 151-159 (SIGGRAPH 85), July 1985.

Pratt, V.R., “Some Constructions for Order-Theoretic Models of Concurrency”, Proc. Conf. on Logics of Programs, 269-283, Springer-Verlag Lecture Notes in Computer Science LNCS 193, Brooklyn, 1985.

Pratt, V.R., “Modeling Concurrency with Partial Orders”, IJPP, 15:1, 33-71,

1986.

Gaifman, H., and Pratt, V.R., “Partial Order Models of Concurrency and the Computation of Functions”, Proc. IEEE Symp. on Logic in Computer Science, Ithaca, NY, 72-85, June, 1987.

Lien, S.-L., Shantz, M., and Pratt, V.R., “Adaptive Forward Differencing for Rendering Curves and Surfaces”, Computer Graphics 21, 4, 111-118, (SIGGRAPH 87), July 1987.

Pratt, V.R., “Direct Least Squares Fitting of Algebraic Surfaces”, Computer Graphics 21, 4, 145-152, (SIGGRAPH 87), July 1987.

Pratt, V.R., “The future of information technology: A US perspective”, Workshop on Research Priorities in Communications and Information Technology, Vol. II, (eds. S.E. Garrett-Jones, B. Lamond, and T. Thomas), Department of Industry, Technology and Commerce, Australian Govt. Publishing Service, Canberra, 1988.

Pratt, V.R., “Enriched Categories and the Floyd-Warshall Connection”, Proc. First International Conference on Algebraic Methodology And Software Technology, 177-180, Iowa City, IA, May, 1989.

Casley, R.T., Crew, R.F., Meseguer, J., and Pratt, V.R., “Temporal Structures”, Proc. Category Theory and Computer Science 1989, ed. D. Pitt et al, LNCS 389, 21-51, Springer-Verlag, 1989. Revised journal version in Mathematical Structures in Computer Science, Volume 1:2, 179-213, July 1991.

Pratt, V.R., “Dynamic algebras as a well-behaved fragment of relation algebras”, Proc. Algebra and Computer Science, ed. Bergman, Maddux, and Pigozzi, LNCS 425, 77-110, Springer-Verlag, 1990. Also Report No. STAN-CS-90-1309, CS Dept., Stanford, 1990.

Pratt, V.R., “Action Logic and Pure Induction”, Logics in AI: European Workshop JELIA '90, ed. J. van Eijck, LNCS 478, 97-120, Springer-Verlag, Amsterdam, NL, Sep, 1990. Also Report No. STAN-CS-90-1343, CS Dept., Stanford, Nov. 1990.

Pratt, V.R., “Modeling Concurrency with Geometry”, Proc. 18th Ann. ACM Symposium on Principles of Programming Languages, 311-322, January, 1991. Also Report No. STAN-CS-90-1342, CS Dept., Stanford, Nov. 1990.

Avrahami, G. and Pratt, V.R., “Sub-Pixel Edge Detection in Character Digitization”, Proc. Raster Imaging and Digitization Technology, Boston, 1991. In Raster Imaging and Digital Typography II, ed. Robert A. Morris and Jacques Andre, 54-64, Cambridge University Press, 1991

Pratt, V.R., “Event Spaces and Their Linear Logic”, Proc. Second International Conference on Algebraic Methodology And Software Technology, 1-23, Iowa City, Iowa, May, 1991.

Pratt, V.R., “Dynamic Algebras: Examples, Constructions, Applications”, Studia Logica, 50:3/4, 571-605, 1992.

Pratt, V.R., "Arithmetic + Logic + Geometry = Concurrency", Proc. Symposium Latin American Theoretical Informatics, LNCS 583, 430-447, Sao Paulo, Brazil, April 1992.

Pratt, V.R., "Origins of the Calculus of Binary Relations", Proc. IEEE Symp. on Logic in Computer Science, 248-254, Santa Cruz, CA, June, 1992.

Pratt, V.R., "The Duality of Time and Information", Proc. Conf. on Concurrency (CONCUR'92), LNCS 630, 237-253, Springer-Verlag, Stonybrook, NY, August, 1992,

Pratt, V.R., "Linear Logic for Generalized Quantum Mechanics", Proc. of Workshop on Physics and Computation (PhysComp'92), 166-180, IEEE, Dallas, Oct, 1992.

Pratt, V.R., "A Roadmap of Some Two-Dimensional Logics", Proc. Workshop on Logic and Information Flow (ed. J. van Eijck and A. Visser), 149-162, MIT Press, 1993.

Pratt, V.R., "The Second Calculus of Binary Relations", Proc. 18th International Symposium on Mathematical Foundations of Computer Science, Gdansk, Poland, Springer-Verlag, 142-155, September 1993.

Gupta, V. and V.R. Pratt, "Gates Accept Concurrent Behavior", Proc. of 34th Ann. IEEE Symp. on Foundations of Computer Science, 62-71, November 1993.

Pratt, V.R., "Time and Information in Sequential and Concurrent Computation", Proc. Theory and Practice of Parallel Programming (TPPP'94), 1-24, Sendai, Japan, Nov. 1994.

Pratt, V.R., "Chu Spaces: Automata with Quantum Aspects", Proc. Workshop on Physics and Computation (PhysComp'94), 186-195, Boston, Nov. 1994.

Coe, T., Mathisen, T., Moler, C., and Pratt, V., "Computational Aspects of the Pentium Affair", IEEE J. Computational Sci. and Eng., 2:1, 18-30, Spring 1995.

Pratt, V.R., "Rational Mechanics and Natural Mathematics", Proc. TAPSOFT'95, LNCS 915, 108-122, Aarhus, Denmark, May 1995.

Pratt, V.R., "Anatomy of the Pentium Bug", Proc. TAPSOFT'95, LNCS 915, 97-107, Aarhus, Denmark, May 1995.

Pratt, V.R., "The Stone Gamut: A Coordinatization of Mathematics", Proc. LICS'95, 444-454, San Diego, CA, June 1995.

Pratt, V.R. "Chu Spaces and Their Interpretation as Concurrent Objects." Invited paper, *Computer Science Today: Recent Trends and Developments* (ed. J. van Leeuwen), Springer-Verlag LNCS 1000 (Commemorative Volume), 392-405, 1995.

Pratt, V.R. and J. Tiuryn, "Satisfiability of Inequalities in a Poset", *Fundamenta Informaticae*, 28:1,2 (Nov. 1996), 165-182.



Pratt, V.R., “Broadening the Denotational Semantics of Linear Logic,” Invited paper, Proceedings *Linear Logic’96*, Tokyo, April 1996. To appear in J. Theoretical Computer Science.

Peled, D.A., Pratt, V.R., and Holzmann, G.J. (editors), “Partial Order Methods in Verification”, Amer. Math. Soc., DIMACS series Vol. 29, 1997.

Plotkin, G.D. and Pratt, V.R., “Teams can see pomsets”, Workshop on Partial Order Methods in Verification, Amer. Math. Soc., DIMACS series Vol. 29, 1997.

Pratt, V.R., “Towards Full Completeness for the Linear Logic of Chu Spaces”, Proceedings, 13th Annual Conference on Mathematical Foundations of Programming Semantics, Pittsburgh, March 1997.

Pratt, V.R., “Types as Processes, via Chu spaces”, Invited paper, Proceedings *EXPRESS’97: Fourth Workshop on Expressiveness in Concurrency*, Electronic Notes in Theoretical Computer Science, Santa Margherita, Italy, September 1997, <http://www.elsevier.nl/locate/entcs/volume7.html>.

Pratt, V.R., “The volume of a cone, without calculus or square roots,” Mathematics Magazine, 71(5):376, 1998.

Knuth, D.E. and Pratt, V.R., Problem 10689 (representation of the field of reals as a ring of integer-coefficient polynomials modulo  $2x - 1$ ), American Mathematical Monthly, 105, p.769, 1998, solution in AMM 107, p.754, 2000.

Pratt, V.R., “Chu Spaces from the Representational Viewpoint”, Invited paper, volume of *Annals of Pure and Applied Logic* honoring R. Parikh, 96:319-313, 1999.

Pratt, V.R., “Chu Spaces,” Notes for School on Category Theory and Applications, University of Coimbra, Portugal, July 13-17, 1999.

Devarajan, H., Hughes, D., Plotkin, G.D., and Pratt, V.R., “Full completeness of the multiplicative linear logic of Chu spaces,” Proceedings 14th Annual IEEE Symposium on Logic in Computer Science (LICS’99, Ed. G. Longo), Trento, Italy, July 1999.

DeFouw, G. and Pratt, V.R., “The Matchbox PC: A Small Wearable Platform,” Third International Symposium on Wearable Computing, 172–175, San Francisco, October 1999.

Pratt, V.R., “Higher Dimensional Automata Revisited,” Invited paper, special issue on higher dimensional automata, ed. E. Goubault, MSCS 10:4, 525-548, August 2000.

Aarabi, P. and Pratt, V.R., “Dynamic Sensor Integration using Spatial Awareness Networks,” Proc. 139th Meeting of the Acoustical Soc. of America, Atlanta, GA, June 2000. Abstract published in Vol. 107:5, Pt. 2, p.2908, of the J. Acoustical Soc. of America.

Pratt, V.R., “Orthocurrence as both Interaction and Observation”, Proc.

Workshop on Spatial and Temporal Reasoning (ed. R. Rodriguez and F. Anger), IJCAI'01, Seattle, August 2001.

Pratt, V.R., "Software Geography: Physical and Economic Aspects", Proc. SOFSEM 2001, LNCS 2234, 336-346, Bratislava, November 2001.

Parikh, R., Parida, M. and Pratt, V., "Sock Sorting: An Example of a Vague Algorithm," Logic Journal of the IGPL, 9:5, 687-692, 2001.

Pavlović, D. and Pratt, V.R., "The continuum as a final coalgebra", TCS 280(1-2):105-122, May 2002. (Substantial revision of "On Coalgebra of Real Numbers," Proceedings Workshop on Coalgebraic Methods in Computer Science (CMCS'99), Amsterdam, March 1999.)

Pratt, V.R., "Event-state duality: the enriched case", Proc. Conf. on Concurrency (CONCUR'02), LNCS 2421, 41-56, Springer-Verlag, August 2002.

Pratt, V.R., "Chu spaces as a semantic bridge between linear logic and mathematics", Invited paper, special issue on linear logic, ed. M. Okada, TCS 294:3, 439-471, February 2003.

Pratt, V.R., "Comonoids in chu: A large cartesian closed sibling of topological spaces", Proc. Workshop on Coalgebraic Methods in CS (CMCS'03), Elsevier ENTCS 82:1, 1-12, July 2003.

Pratt, V.R., "Transition and Cancellation in Concurrency and Branching Time", Math. Structures in Comp. Sci., 13:4, 485-529, August 2003.

Thrun, S. et al, "Stanley: The Robot that Won the DARPA Grand Challenge," Journal of Field Robotics 23(9), 661-692 (2006), Wiley Periodicals Inc.

Propper, R., Mohajer, K., Pratt, V., "CommonSense: a preprocessing system to identify errors in large transcribed corpora," in Multisensor, Multi-source Information Fusion: Architectures, Algorithms, and Applications 2006 (ed. Belur V. Dasarathy), Proc. SPIE Vol. 6242, 2006.

Pratt, V.R., "Factoring Heron", The College Mathematics Journal, 40:15-16, 2009.

Pratt, V.R. "Communes via Yoneda, from an Elementary Perspective", Fundamenta Informaticae 103, 203218, DOI 10.3233/FI-2010-325, IOS Press, 2010.

Pratt, V.R., "Linear Process Algebra", Proc. Distributed Computing and Internet Technology, LNCS 6536, 92-111, Springer-Verlag, February 2011.

Levinson, J. et al, "Towards Fully Autonomous Driving: Systems and Algorithms", Proc. 2011 IEEE Intelligent Vehicles Symposium, Baden-Baden, Germany, June 5-9, 2011.