

Paul Viola

Address:

Department of Electrical Engineering and Computer Science
Massachusetts Institute of Technology
545 Technology Square
Cambridge MA 02139

Education:

M.I.T., S. B. May 1988 (Computer Science)
M.I.T., S. M. February 1991 (Computer Science)
M.I.T., Ph. D. June 1995 (Computer Science)

Professional Appointments:

1991-1991 Visiting Researcher, Salk Institute for Biological Research, CA
1993-1994 Visiting Researcher, Salk Institute for Biological Research, CA
1995-1995 Post-doctoral Fellow, Salk Institute for Biological Research, CA
1996— Assistant Professor, MIT

Industrial Appointments:

1990-1994 Arris Pharmaceuticals, Cambridge, MA and San Francisco, CA
1988 & 1989 IBM - Watson Research Center (Summer Internship), NY

Key professional activities:

1995— Associate Editor of the Journal Neural Computation
1997 Co-Program Chair for Conference on Neural Information Processing

Relevant Publications:

- Erik Miller and Paul Viola. Ambiguity and Constraint in Mathematical Expression Recognition. In Proceedings of the American Association for Artificial Intelligence Conference, 1998.
- Jeremy De Bonet and Paul Viola. Structure driven image database retrieval. In *Advances in Neural Information Processing*, volume 10, Denver 1997, 1997. MIT Press, Cambridge.
- Jeremy De Bonet, Charles Isbell, and Paul Viola. Optimization by mutual information maximization and input clustering. In *Advances in Neural Information Processing*, volume 9, Denver 1996, 1996. MIT Press, Cambridge.
- Paul Viola and William M. Wells III. Mutual information: An approach for the registration of object models and images. *International Journal of Computer Vision*, 1997.
- Jeremy De Bonet and Paul Viola. Texture Recognition Using a Non-parametric Multi-Scale Statistical Model. *Proceedings IEEE Conf. on Computer Vision and Pattern Recognition*, 1998.

Other Significant Publications:

- William Freeman and Paul Viola. Bayesian model of surface perception. In *Advances in Neural Information Processing*, volume 10, Denver 1997, 1997. MIT Press, Cambridge.
- Jeremy De Bonet and Paul Viola. A non-parametric multi-scale statistical model for natural images. In *Advances in Neural Information Processing*, volume 10, Denver 1997, 1997. MIT Press, Cambridge.
- Paul A. Viola, Nicol N. Schraudolph, and Terrence J. Sejnowski. Empirical entropy manipulation for real-world problems. In *Advances in Neural Information Processing*, volume 8, Denver 1995, 1995. MIT Press, Cambridge.
- Paul Viola. Feature-based recognition of objects. In Kevin Bowyer and Lawrence Hall, editors, *Intelligent Machine Learning in Computer Vision: What, Why, and How?*, volume FS-93-04 of *Papers from the 1993 Fall Symposium*, pages 60–65. The AAAI Press, Menlo Park, California, 1993.

Collaborators (past 48 months):

Dr. William Freeman, Mitsubishi Electric Research.

Prof. W. E. L. Grimson, MIT Artificial Intelligence Lab.

Prof. Tomaso Poggio, MIT Artificial Intelligence Lab.

Prof. Terrence Sejnowski, Salk Institute for Biological Research, CA.

Graduate advisor: **Prof. Tomás Lozano-Pérez**, MIT

Post-doctoral advisor: **Prof. Terrence Sejnowski**, Salk Institute for Biological Research, CA.