Curriculum Vitae

John A. Oliensis

EDUCATION

B.S. Mathematics and Physics, Yale University		1975
Graduate Study:	University of Chicago	1975–1977
	Princeton University	1978–1980
Ph.D. Theoretical High Energy Physics, University of Chicago		1981

Thesis Supervisor: Frank Wilczek, Massachusetts Institute of Technology.

PROFESSIONAL EXPERIENCE

2003– Associate Professor, Computer Science, Stevens Institute of Technology

1994–02 Research Scientist, NEC Research Institute, Princeton, NJ

1992–94 Research Assistant Professor, Computer Science, University of Massachusetts/Amherst

1988–92 Research Scientist, University of Massachusetts/Amherst

1983–88 Postdoc in Theoretical Physics, Argonne National Lab.

1980–83 Postdoc in Theoretical Physics, Fermi National Accelerator Lab.

WORKSHOPS ORGANIZED

- **Beyond Multiview Geometry: Robust Estimation and Organization of Shapes from Multiple Cues**, IEEE International Workshop held in conjunction with the IEEE Conference on Computer Vision and Pattern Recognition, 2007. Organizers: John Oliensis (lead), Elli Angelopoulou, George Kamberov, Quynh Dinh.
- **The Third NEC Vision Workshop**. Organizers: John Oliensis (lead), Davi Geiger, NYU; David Jacobs, NEC; Nava Rubin, NYU; Robert Shapley, NYU; and Jeffrey Mark Siskind, NEC. A four–day invited workshop on computer vision, visual psychology, neuroscience, and learning, New York University, February 1998.
- **The Second NEC Vision Workshop**. Organizers: John Oliensis (lead), James Elder, Dave Jacobs, Mike Langer, Zili Liu, Lance Williams. A two–week invited workshop on computer vision, visual psychology, and neuroscience, NEC Research Institute, Princeton, June 1996.
- **The First NEC Workshop on Computer Vision**. Chair: John Oliensis. A two–week invited workshop on computer and human vision and neuroscience, NEC Research Institute, Princeton, March 1995.

(For workshop participants and program committees see Appendix.)

HONORS

- Associate Editor, IEEE Transactions on Pattern Analysis and Machine Intelligence, 2005–Present.
- Davis Memorial Award for Research Excellence, Stevens Institute of Technology, 2006. For the paper: "The Least-Squares Error for Structure from Infinitesimal Motion," J. Oliensis, **International Journal of Computer Vision** Vol. 61, No. 3, 259–299, 2005.
- Stanley Memorial Prize in Pure and Applied Mathematics, Yale University, 1975.

PATENTS

- "Method for recovering 3D scene structure and camera motion directly from image intensities," US Patent Issued on February 14, 2006.

CONFERENCE INVITATIONS AND COLLOQUIA

- Invited participant, Banff workshop on Mathematical Image Analysis and Processing, October 2004.
- Siemens Distinguished Seminar, February 2004.
- Invited six week visitor at the Institute for Mathematics and its Applications, program in Vision, Speech, and Language, University of Minnesota, October 2000.
- Invited one month visitor, Weizmann Institute, Israel, March–April 1999.
- SUNY Buffalo Colloquium: November 1998.
- Invited participant at the Snowbird Workshop on *Machines that Learn*.
- Led the first panel session held in the series of IEEE International Conferences on Computer Vision, January 1998.
- Invited participant and speaker, Workshop on Mathematical Methods in Computer Vision, University of Minnesota, September 1995, David Mumford, Allen Tannenbaum, Guillermo Sapiro, organizers.
- Yale University Colloquium, September 1995.
- Invited long–term visitor in the six–month Programme in Computer Vision, Isaac Newton Institute for Mathematical Sciences, Cambridge University, England, David Mumford, Andrew Blake, Brian Ripley, organizers, 1993.

INVITED TALKS

- California Institute of Technology, November 2008. Presented by Hongzhi Wang.
- University of California, Los Angeles November 2008. Presented by Hongzhi Wang.
- Microsoft Research, November 2008. Presented by Hongzhi Wang.
- University of Maryland, May 2008. Presented by Hongzhi Wang.
- Princeton, October 2007. Presented by Hongzhi Wang.
- New York University, October 2007. Presented by Hongzhi Wang.
- University of Pennsylvania, October 2007. Presented by Hongzhi Wang.
- Rutgers University, April 2002.
- McGill University, April 2002.
- Stevens Institute of Technology, Hoboken, New Jersey, November 2002.
- University of Illinois, Champaign–Urbana, November 2001.
- Columbia University, October 2001.
- University of Oxford, November 2001.
- University of Surrey, November 2001.
- University of Reading, November 2001.
- University of Cambridge, November 2001.
- California Institute of Technology, October 2001.
- University of California, Los Angeles, October 2001.
- University of Southern California, October 2001.
- University of California at Berkeley, October 2001.
- Stanford University, October 2001.
- Carnegie–Mellon University, Robotics Institute Seminar, September 2001.
- Massachusetts Institute of Technology, Artificial Intelligence Laboratory, September 2001.
- Microsoft Research, July 2001.
- University of British Columbia, July 2001.
- McGill University, June 2001.
- INRIA, Sophia Antipolis, France, May 2001.
- INRIA, Grenoble, France, May 2001.
- University of Maryland, April 2001.
- New York University, psychology department, November 1999.

- University of Pennsylvania, September 1999.
- Hebrew University, March 1999.
- Weizmann Institute, March 1999.
- New York University, October 1997.
- University of Toronto, December 1995.
- Rutgers University, November 1995.
- Sarnoff Research Labs, January 1995.
- University of Pennsylvania, December 1994.
- Xerox PARC, December 1993.
- IBM/Almaden, November 1993.
- Massachusetts Institute of Technology, Artificial Intelligence Laboratory, November 1993.
- Brown University, November 1993.
- Technical University, Munich, May 1993.
- University of North Carolina, Chapel Hill, March 1992.
- Yale University, February 1992.
- McGill University, February 1992.

GRANTS RECEIVED

- National Science Foundation
  Shape from Shading Without Regularization. J. Oliensis, A. Hanson. Award $248,000. Date: September 1991–February 1994.
- National Science Foundation
  SGER: Qualitative Guidance for Recovering Shape From Shading. J. Oliensis, A. Hanson. Award $16,018. Date: June 1990–May 1991.
- National Science Foundation
  Visualizing Research Topics in Computer Science. E. Riseman, R. Grupen, J. Oliensis, B. Woolf, R. Weiss. Award $20,000. Date: August 1989–December 1990.

PROFESSIONAL SERVICE

- Member of the program committee for the Sixth IEEE Computer Society Workshop on Perceptual Organization in Computer Vision, 2008.
- Member of the program committee for the Third International Symposium on 3D Data Processing, Visualization and Transmission, 2006.

- Member of the program committee for the 2001 International Conference on Computer Vision.
- Member of the program committee for the 2000 IEEE Conference on Computer Vision and Pattern Recognition.
- Member of the program committee for the 1999 IEEE Conference on Computer Vision and Pattern Recognition.
- Member of the program committee for the 1999 Workshop on Vision Algorithms: Theory and Practice.
- Session moderator for ARVO (Association for Research in Vision and Opthalmology) Conference, May 1998.
- Member of the program committee for the IEEE Workshop on Representation of Visual Scenes (in conjunction with ICCV'95).
- Member of the program committee for the 1994 IEEE International Conference on Pattern Recognition (invited session chair).
- Member of the program committee for the 1993 IEEE Conference on Computer Vision and Pattern Recognition.
- Reviewed grant proposals for the National Science Foundation; Israeli Binational Science Foundation; Natural Sciences and Engineering Research Council of Canada, DARPA.
- Reviewer for the International Journal of Computer Vision; IEEE Transactions on Pattern Analysis and Machine Intelligence; IEEE Transactions on Robotics and Automation; Journal of the Optical Society of America A; Artificial Intelligence Journal; Journal of Vision; Computer Vision, Graphics, and Image Processing: Image Understanding; Journal of Mathematical Imaging and Vision; IEEE Transaction on Image Processing; IEE Proceedings: Vision, Image and Signal Processing; Optical Engineering; IEEE Transactions on Image Processing; IEEE Transactions on Geoscience and Remote Sensing; Graphical Models and Image Processing; SIGGRAPH; International Journal of Pattern Recognition and Artificial Intelligence; National Science Foundation; Natural Sciences and Engineering Research Council of Canada; Israeli bi-national commission; NIPS (Neural Information Processing Systems); IEEE Journal on Systems, Man and Cybernetics; MIT Press; ACM Computing Surveys; Machine Vision and Applications; Journal of Computational and Applied Mathematics; Journal of Mathematical Psychology, Pattern Recognition.

PROFESSIONAL MEMBERSHIPS

- Senior member IEEE.

SABBATICAL VISITORS CO–HOSTED

- Michael Lindenbaum, Technion.
- Mike Werman, Hebrew University.

- Thomas Papathomas, Rutgers.
- Daphna Weinshall, Hebrew University.

POSTDOCS CO–SUPERVISED

- 2001-2003. Margarita Osadchy (PhD University of Haifa). Currently lecturer (assistant professor) at Haifa.
- 2001-2003. Daniele Zavagno (PhD Rutgers). Currently Ricercatore at Universit degli Studi di Milano-Bicocca.
- 2000-2003. Olga Veksler (PhD Cornell). Currently assistant professor at University of Western Ontario.
- 1999-2000. Venu Govindu (Phd University of Maryland). Currently assistant professor at Indian Institute of Science
- 1998-2000. Bosco Tjan (PhD University of Minnesota). Currently associate professor at USC.
- 1994-2001. Zili Liu (PhD Brown University). Currently associate professor at UCLA.
- 1997-1999. Richard Mann (PhD University of Toronto). Currently associate professor at the University of Waterloo.
- 1998-1999 Sebastien Roy (PhD) Currently professor at University of Montreal.
- 1995-1996. James Elder (PhD McGill). Currently associate professor at York University.
- 1995-1998. Michael Langer (PhD McGill). Currently associate professor at McGill University.
- 1994-2000. Lance Williams (PhD University of Massachusetts/Amherst. Currently associate professor at the University of New Mexico).

PhD STUDENTS SUPERVISED

- Wei Jiang, Stevens Institute of Technology, in progress.
- Hongzhi Wang, Stevens Institute of Technology, PhD expected December 2008.
- External reviewer for Phd Thesis for Emmanuel Prados, University of Nice Sophia Antipolis and Institut National de Recherche en Informatique, France, 2004.
- Venu Govindu, "Probabilistic Models for Motion Estimation,"University of Maryland, completed 1999.
- R. Manmatha, "From Image Deformations to Shape: Texture and Motion," University of Massachusetts, completed 1997.
- Outside examiner for PhD Defense, James Maclean, University of Toronto, 1995.
- J. Inigo Thomas, "Reducing Noise in 3D Models Recovered From a Sequence of 2D Images," University of Massachusetts, completed 1994.

COURSES TAUGHT

- Introduction to Artificial Intelligence (graduate)
- Introduction to the Theory of Algorithms (graduate)
- Computer Vision (graduate)
- Machine learning (graduate)

LOCAL SERVICE

- Stanley Fellowship committee 2005.
- Stevens Committees: Academic Appeals; Graduate Affairs; Library.

Appendix: Program Committtees and Participant lists for Workshops

- IEEE International Conference on **Beyond Multiview Geometry**. Program committee: Yiannis Aloimonos, University of Maryland, Roberto Cipolla, University of Cambridge, Tamal Dey, Ohio State University, Paolo Favaro, Heriot-Watt University, Wolfgang Forstner, University of Bonn, Yakup Genc, Siemens Corporate Research, Michael Goesele, University of Washington, Cindy Grimm, Washington University in St. Louis, Martial Hebert, Carnegie Mellon University, Aaron Hertzmann, University of Toronto, Joachim Hornegger, University of Erlangen-Nuremberg, Gerda Kamberova, Hofstra University, Kiriakos Kutulakos, University of Toronto, Michael Langer, McGill University, Sang Wook Lee, Sogang University, Tomas Pajdla, Czech Technical University, Marc Pollefeys, University of North Carolina at Chapel Hill, Szymon Rusinkiewicz, Princeton University, Silvio Salvarese, University of Illinois at Urbana-Champaign, Dimitris Samaras, Stony Brook University, Radim Sara, Czech Technical University, Yoichi Sato, University of Tokyo, Yoav Schechner, Technion - Israel Institute of Technology, Gregory Slabaugh, Siemens Corporate Research, Stefano Soatto, University of California at Los Angeles, Gabriel Taubin, Brown University, Amitabh Varshney, University of Maryland, Todd Zickler, Harvard University.

- **First NEC Vision Workshop.** Prof. Heinrich Bulthoff (Director Max-Planck, Germany), Dr. Brian Burns (Teleos, California), Prof. Jacob Feldman (Rutgers), Prof. David Forsyth (UC Berkeley), Dr. Jonas Garding (KTH, Sweden), Dr. Richard Hartley (GE, Massachusetts), Prof. Allan Jepson (U. of Toronto), Prof. Dan Kersten (U. of Minnesota), Prof. David Knill (U. of Pennsylvania), Dr. Tony Lindeberg (KTH, Sweden), Dr. Mike Langer (McGill), Prof. Larry Maloney (NYU), Dr. Steve Maybank (GEC/Oxford U.), Prof. Pietro Perona (Cal Tech), Prof. Jean Ponce (U. of Illinois), Dr. Harpreet Sawhney (IBM/Almaden), Stefano Soatto (Cal Tech), Prof. Mike Tarr (Yale), and Prof. Shimon Ullman (Weizmann/MIT).

- **Second NEC Vision Workshop.** Tao Alter (MIT), Jonas August (McGill), Bart Anderson (MIT), Ronen Basri (Weizmann Institute), Peter Belhumeur (Yale), Irving Biederman (USC), Peter Blicher (NEC), Patrick Cavanagh (Harvard), Ingemar Cox (NEC), Sven Dickinson (Rutgers), James Elder (NEC/York), Davi Geiger (NYU), Alan Gilchrist (Rutgers), Mel Goodale (U. of Western Ontario), Keith Humphrey (U. of Western Ontario), Glyn Humphreys (U. of Birmingham), Dave Jacobs (NEC), Phil Kellman (UCLA), David Kriegman (Yale), Ilona Kovacs (Rutgers), Michael Langer (NEC), Zili Liu (NEC), David Lowe (U. of British Columbia), Pascal Mamassian (New York Univ), John Oliensis (NEC), Steve Omohundro (NEC), Thomas Papathomas (Rutgers), V.S. Ramachandran (UC San Diego), Ron Rensink (Nissan), Ruth Rosenholtz (NASA Ames), Nava Rubin (Harvard/NYU), Kaleem Siddiqui (McGill/Yale), Eric Saund (Xerox PARC), Pawan Sinha (MIT), Rudiger von der Heydt (Johns Hopkins), Joachim Weickert (Utrecht U. Hospital), Laurie Wilcox (Universite de Montreal/York), Lance Williams (NEC), Steve Zucker (McGill/Yale).

- **Third NEC Vision Workshop.** Paul Viola (MIT), Shimon Ullman (Weizmann Institute), Guillermo Sapiro (University of Minnesota), Shinsuke Shimojo (Caltech), Dov Sagi (Weizmann Institute), Philip Kellman (UCLA), Jitendra Malik (UC Berkeley), Yali Amit (University of Chicago), Albert Yonas (University of Minnesota), Geoffrey Hinton (University of Toronto), Bill Freeman (MERL), Mike Merzenich (UCSF).