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Education

Ph.D. Computer and Information Science, May 1996
University of Pennsylvania, Philadelphia, PA.

M.S.E. in Computer and Information Science, June 1988
Slovak Technical University, Bratislava, Slovakia, with honors.

Professional Experience

Visiting Professor (August 2006- August 2008 2005)
Department of Computer Science, Stanford University

Assistant Professor (August 1999- June 2005)
Department of Computer Science, George Mason University

Visiting Professor (January 2003 - June 2003)
Department of EECS, University of California Berkeley

Visiting Research Professor (June 2001)
Austrian Research Center, Siebersdorf, Computer Vision K+ Competence Center, Austria, Vienna

Research Assistant (September 1998 - September 1999)
Department of Electrical Engineering and Computer Science, University of California Berkeley

Postdoctoral Researcher (May 1996 - August 1998)
Department of Electrical Engineering and Computer Science, University of California Berkeley and PATH

Research Engineer (January 1997 - September 1997)
Controller design for the automated vehicle in collaboration with Honda R&D, North America

Research Assistant (September 1991 - March 1996)
Grasp Laboratory, University of Pennsylvania, Philadelphia

Dean's Fellow (September 1990 - September 1991)
University of Pennsylvania, Philadelphia

Research Fellow (September 1988 - September 1990)
Slovak Technical University, Department of Informatics, Bratislava

Fellowships and Awards

Intl. Conference on Computer Vision, Supervisor of the Student Contest Winning Team, 2005

US/JAPAN Robotics Symposium, NSF participation award, 2005.

National Science Foundation, CAREER Award, 2004.

David Marr's prize (co-winner), International Conference in Computer Vision, 1999.

Research Assistant, Department of EECS, University of California Berkeley, (1996-1998).

Research Fellow, Department of CIS, University of Pennsylvania, (1990-1995).

Dean's award for distinguished M.S.E Thesis, STU, Bratislava, Slovakia, 1988.

Chancellor's Prize Award, STU, Bratislava, Slovakia, 1988.

Publications

Books

Y. Ma, S. Soatto, J. Košecká and S. Sastry. An Invitation to 3D Vision: From Images to Geometric Models. *Springer-Verlag*, Interdisciplinary Applied Mathematics Series, December 2003. with

Journals

W. Zhang and J. Košecká. Hierarchical Building Recognition. *Image and Vision Computing*, (accepted), to appear in 2006.

J. Košecká and W. Zhang. Extraction, Matching and Pose Recovery using Rectangular structures. *Computer Vision and Image Understanding Journal*, 3, pp. 274-293, December 2005.

J. Košecká, F. Li, and X. Yang. Global Localization and Relative Positioning Based on Scale-Invariant Keypoints. *Robotics and Autonomous Systems*, Vol. 52-1, pp. 27-38, July 2005.

H. Farid and J. Košecká. Estimating Surface Orientation Using Bispectral Analysis. *IEEE Transactions on Image Processing*, submitted December 2005 (under review).

Y. Ma, R. Vidal, K. Huang, J. Košecká, S. Sastry. Rank Conditions on the Multiple View Matrix. *International Journal of Computer Vision* 59 (2):115-137, 2004.

Y. Ma, J. Košecká, S. Sastry. Optimization Criteria and Geometric Algorithms for Motion and structure estimation. *International Journal of Computer Vision* (44)3:219-249, 2001.

Y. Ma, S. Soatto, J. Košecká, S. Sastry. Reconstruction and Reprojection up to Subgroups. *International Journal of Computer Vision*, (38)3:219-229, 2000.

Y. Ma, J. Košecká, S. Sastry. Linear Differential Algorithm for Motion Recovery: A Geometric Approach. *International Journal of Computer Vision*, 36(1):71-89, 1999.

C. J. Taylor, J. Košecká, R. Blasi and J. Malik. Comparative Study of Vision-Based Lateral Control Strategies for Autonomous Highway Driving, *International Journal of Robotics Research*, Vol. 18, 5:442-53, 1999.

Y. Ma, J. Košecká and S. Sastry. Vision-guided Navigation for a Nonholonomic Mobile Robot. *IEEE Transactions on Robotics and Automation*, Vol. 15, 3:521-536, 1999.

- J. Košecká. Visually Guided Navigation. *Journal of Robotics and Autonomous Systems*, Vol. 21:37–51, 1997.
- J. Košecká and H. I. Christensen. Experiments in Behavior Composition. *Journal of Robotics and Autonomous Systems*, Vol. 19:287–298, 1997.
- J. Košecká, R. Bajcsy and H. I. Christensen. Discrete Event Modeling of Visually Guided Behaviors. *International Journal on Computer Vision. Special Issue on Qualitative Vision*, Vol. 12, 3:295–316, 1995.
- J. Košecká and R. Bajcsy. Discrete Event Systems for Autonomous Mobile Agents. *Journal of Robotics and Autonomous Systems*, Vol. 12:187–198, 1994.

Book Chapters

- J. Košecká. Hierarchies of sensing and control in visually guided agents. *SOFSEM 2000: Theory and Practice of Informatics*. LNCS vol. 1963, p.227–44, Springer-Verlag 2000, Editors: V. Hlavač, K.G. Jeffery, J. Wiedermann, J. Berlin.
- J. Košecká, Y. Ma and S. Sastry. Optimization Criteria, Sensitivity and Robustness of Motion and Structure Estimation. Workshop on Vision Algorithms: Theory and Practice. Springer-Verlag 2000, LNCS vol. 1883, p.166–182, Editors: B. Triggs, A. Zisserman and R. Szeliski.
- Y. Ma, J. Košecká and S. Sastry. Vision Guided Navigation for a Nonholonomic Mobile Robot. *The Confluence of Vision and Control*, p.134–146, Springer-Verlag 1998, Editors: G. Hager and D. Kriegman.
- J. Košecká. Visually Guided Navigation. *Intelligent Robots - Sensing, Modeling and Planning*, p.77–96, World Scientific Publ. Co., Editors: Robert C. Bolles, Horts Bunke and Hartmut Noltemeier, Singapore, 1997.
- J. Košecká, R. Bajcsy and Max Mintz. *Control of Visually Guided Behaviors* in C. Brown and D. Terzopoulos (eds.), *Real-Time Computer Vision*, Cambridge University Press, 1994.

Refereed Conference Proceedings and Workshops

- W. Zhang and J. Košecká. A new inlier identification scheme for robust estimation problems. *Robotics Science and Systems*, Philadelphia, 2006.
- W. Zhang and J. Košecká. Generalized RANSAC framework for relaxed correspondence problems. *3DPVT*, Chapel Hill, North Carolina, 2006.
- W. Zhang and J. Košecká. Image Based Localization in Urban Environments. *3DPVT*, Chapel Hill, North Carolina, 2006.
- F. Li and J. Košecká. Strangeness Based Feature Selection for Part Based Recognition. *Beyond Patches Workshop, IEEE Conference on Computer Vision and Pattern Recognition*, New York City, 2006.
- W. Zhang and J. Košecká. Ensemble Methods for Robust Motion Estimation. *RANSAC 25 Workshop, IEEE Conference on Computer Vision and Pattern Recognition* New York City, 2006.
- F. Li and J. Košecká. Probabilistic Location Recognition Using Reduced Feature Set. *IEEE Conference of Robotics and Automation*, Orlando, Florida, 2006
- W. Zhang and J. Košecká. Nonparametric estimation of multiple structures with outliers. *Dynamic Vision Workshop, European Conference on Computer Vision*, Graz, Austria, 2006.

- W. Zhang and J. Košecká. A new inlier identification scheme for robust estimation problems. *Robotics Science and Systems*, Philadelphia, 2006.
- W. Zhang and J. Kosecka. Localization based on Building Recognition. *Workshop on Applications for Visually Impaired*, IEEE Conference, CVPR, 2005.
- J. Košecká and X. Yang. Global Localization and Relative Pose Estimation Based on Scale-Invariant Features. *International Conference on Pattern Recognition*, Vol 4., 2004.
- J. Košecká and F. Li. Vision-Based Markov Localization. *IEEE Conference on Robotics and Automation*, p.1481-1487, 2004.
- J. Košecká and X. Yang. Global Localization and Location Recognition Using Scale Invariant Features. *Workshop on Statistical Learning in Computer Vision*, European Conference in Computer Vision, p.49-59, 2004 .
- W. Zhang and J. Košecká. Extraction, Matching and Pose recovery based on dominant rectangular structures. *Proceedings of High Level Knowledge in Vision Workshop*, p. 83-93, ICCV 2003, Nice, France.
- J. Hayes, M. Mc Junkin and J. Košecká. Communication Enhanced Navigation Strategies for Teams of Mobile Agents. IROS 2003, Las Vegas.
- J. Košecká, L. Zhou, P. Barber and Z. Duric. Qualitative Image-Based Localization in Indoors Environments. CVPR 2003, Vol.II, p. 3-8, Madison, Wisconsin.
- J. Košecká and Y. Ma. Introduction to Multi-view Rank Conditions and their Applications: A Review. (Invited talk). *Proceedings, 2002 Tyrrhenian International Workshop on Digital Communications*. Advanced Methods for Multimedia Signal Processing, September 2002, Capri, Italy, p. 161-169, (invited presentation).
- J. Košecká and W. Zhang. Video Compass. *European Conference on Computer Vision* , LNCS 2350, Springer Verlag, p. 476-491 .
- W. Zhang and J. Košecká. Efficient Detection of Vanishing Points. *IEEE International Conference on Robotics and Automation*, May 2002, Washington DC.
- W. Zhang and J. Košecká and F. Li. Mosaic Construction from a Sparse Set of Views. *International Symposium on 3D Data Processing, Visualisation and Transmission (3DPVT)*, June 2002, Padova, Italy.
- Y. Ma, J. Košecká, K. Huang. Rank Deficiency Condition of the Multiple View Matrix for Mixed Point and Line Features. *5th Asian Conference on Computer Vision*, Melbourne, Australia, January 2002.
- Y. Ma, Rene Vidal, J. Košecká, and S. Sastry. Kruppa's equation revisited: Degeneracy and Renormalization. *European Conference on Computer Vision, Dublin, Ireland, 2000*.
- J. Košecká, Y. Ma and S. Sastry. Optimization Criteria, Sensitivity and Robustness of Motion and Structure Estimation. *Vision Algorithms Workshop, International Conference in Computer Vision 1999*, p.9-17, Corfu, Greece.
- Y. Ma, S. Soatto, J. Košecká and S. Sastry. Euclidean Reconstruction and Reprojection Up to Subgroups. **David Marr's prize**, *International Conference in Computer Vision 1999*, Vol. 2:773-80, Corfu, Greece.
- Y. Ma, O. Shakernia, J. Košecká and S. Sastry. A Lie Theoretic Approach to Structure and Motion in Computer Vision. *International Federation of Automatic Control (IFAC) Conference 1999*.

- Y. Ma, J. Košecká and S. S. Sastry. Optimal Motion from Image Sequences: A Riemannian Viewpoint, *International Symposium on The Mathematical Theory of Networks and Systems*, p.1047–50, Eds: A. Beghi, L. Finesso, G. Picci. Il Poligrafo, Padova, Italy.
- J. Košecká, C. Tomlin, G. Pappas, and S. Sastry. 2-1/2 D Conflict Resolution Maneuvers for ATMS, *Proceedings from Conference On Decision and Control 1998*, Vol. 3:2650-5, 1998.
- Y. Ma, J. Košecká and S. S. Sastry. A Motion Recovery From Image Sequences: Discrete vs. Differential Viewpoint. *Proceedings from the European Conference on Computer Vision 1998*, Vol. 2:337-53.
- J. Košecká, R. Blasi, C. J. Taylor and J. Malik. Comparative Study of Vision-Based Lateral Control Strategies for Autonomous Highway Driving, *IEEE Conference on Robotics and Automation*, Vol. 3:1903-8, 1998.
- C. Tomlin, G. Pappas, G. J. Košecká, J. Lygeros and S. Sastry. Advanced air traffic automation: a case study in distributed decentralized control. *Control Problems in Robotics and Automation. International Workshop*, p.261-95, San Diego, CA, Ed: B. Siciliano, K. Valavanis, Berlin, Germany: Springer-Verlag, 1998.
- J. Košecká, R. Blasi, C. J. Taylor and J. Malik. Vision-based Lateral Control of Vehicles. *Proceedings from ITSC Intelligent Transportation Systems 1997*, p.900-5, November 1997, Boston.
- J. Košecká, C. Tomlin, G. Pappas, and S. Sastry. Verification of Cooperative Conflict Resolution Maneuvers, *5th International Conference on Hybrid Systems*, September 1997, Notre Dame.
- J. Košecká, C. Tomlin, G. Pappas, and S. Sastry. Generation of Conflict Resolution Maneuvers for Air Traffic Management, *IROS 97*, Vol. 3:1598-603, Grenoble, September 1997.
- Y. Ma, J. Košecká and S. Sastry. Vision-guided Navigation for a Nonholonomic Mobile Robot. *Proceedings from IEEE Conference on Decision and Control 1997*, Vol. 3:3069-74, San Diego, December 1997.
- J. Košecká and Hanène Ben-Abdallah. An Automaton Based Algebra for Specifying Robotic Agents. *Third AMAST Workshop on Real-Time Systems*, p.110-122, Salt Lake City, 1996.
- J. Adams, R. Bajcsy, J. Košecká, V. Kumar, R. Mandelbaum, M. Mintz, Richard L. Paul, C. C. Wang, Y. Yamamoto and X. Yun. Cooperative mobile and manipulatory robotic agents and humans. *IROS 95 International Conference on Robotics Systems*, August 1995, Vol. 11, 2:89-97, Pittsburgh, Pennsylvania.
- J. Košecká, R. Bajcsy and H. Christensen. Specifying tasks for robotics agents and observers, *Symposium on Intelligent Robotic Systems*, p. 1-8, June 1995, Pisa, Italy.
- R. Bajcsy and J. Košecká. The problem of signal and symbol integration: a study of cooperative mobile autonomous agent behaviors. *KI-95: Advances in Artificial Intelligence*, p.49-64, 19th Annual German Conference on Artificial Intelligence, Bielefeld, Germany, Ed.: Wachsmuth, I.; Rollinger, C.-R.; Brauer, W. Berlin, Germany: Springer-Verlag, 1995.
- J. Košecká and L. Bogoni. Application of Discrete Event Systems for Modeling and Controlling Robotic Agents. *Proceedings IEEE International Conference on Robotics and Automation*, p.2557-62, May 1994, San Diego.
- M. Salganicoff, L. Bogoni, G. Sandini, J. Mendelsohn and J. Košecká. Mobile Robot Control Tasks Using Qualitative Image Measures - Behavior Based Approach. *AAAI Symposium*, April 1994, Stanford, California.
- J. Košecká and R. Bajcsy. Cooperation of Visually Guided Behaviors. *Proceedings of International Conference in Computer Vision*, p. 506-6, May 1993, Berlin.

- J. Košecká and R. Bajcsy. Cooperative behaviors - Discrete Event System Based Approach. *Proceedings from Workshop on Dynamically Interacting Robots*, Chambery, 1993.
- J. Košecká and R. Bajcsy. Discrete Event Systems for Autonomous Mobile Agents. *The 1993 Stockholm Workshop on Computational Vision*, also appears in *Journal of Robotics and Autonomous Systems*, Vol. 12:187–198, 1994.
- P. Frič and J. Košecká. Environment for knowledge based systems (in Slovak). In *Winter School in Computer Science, SOFSEM, 1990* Janske Lázně, Krkonoše, Czechoslovakia.
- J. Košecká. OPS5 Production System. Poster. In *Proceedings from International Conference on Artificial Intelligence and Information-Control Systems of Robots*, Štrbské Pleso, November 1989, Czechoslovakia .

Other Publications and Technical Reports

- J. Košecká. Exploiting Geometric and Topological Constraints of Man-Made Environments for Model Acquisition. *Proceedings of Annual Allerton Conference 2002*, UIUC, October 2002.
- J. Košecká. Modelling Man-Made Environments: Geometric and Appearance Based Techniques. *Workshop on Intelligent Human Augmentation and Virtual Environments*. October 2002, University of North Carolina, Chapel Hill.
- J. Košecká. Experiments in Estimating Independent 3D Motion using EM. *Analysis and Understanding of Time Varying Imagery*, Washington DC, October 2001.
- W. Zhang and J. Košecká Experiments in Building Recognition. Technical Report, GMU-CS-TR-2004-3, 2004.
- J. Košecká and X. Yang Euclidean Structure and Motion from Location Recognition, Global Localization and Relative Positioning Based on Scale Invariant Keypoints. Technical Report, GMU-CS-TR-2004-2, 2004.
- Y. Ma, J. Košecká, S. Sastry Euclidean Structure and Motion from Image Sequences. UC Berkeley Memorandum No. UCB/ERL M98/38, June 23, 1998.
- Y. Ma, J. Košecká, S. Sastry Optimal Motion from Image Sequences: A Riemannian Viewpoint. UC Berkeley Memorandum No. UCB/ERL M98/37, June 22, 1998.
- Y. Ma, J. Košecká, S. Sastry Motion Recovery from Image Sequences: Discrete Viewpoint vs. Differential Viewpoint. UC Berkeley Memorandum No. UCB/ERL M98/11, February 1998.
- J. Malik, J. Košecká, C. J. Taylor, P. McLauchlan. Development of Binocular Stereopsis for Vehicle Lateral Control, Longitudinal Control and Obstacle Detection. PATH MOU-257 Final Report, October 1997.
- J. Košecká, R. Blasi, C.J. Taylor and J. Malik. Vision-Based Control of Vehicles. Department EECS, UC Berkeley, UCB/ERL M97/67, August 1997.
- Y. Ma, J. Košecká and S. Sastry. Vision-guided Navigation for a Nonholonomic Mobile Robot. Memorandum UCB/ERL M97/34, June 1997.
- R. Bajcsy and J. Košecká. The problem of Signal and Symbol Integration: A Study of Cooperative Mobile Autonomous Agent Behaviors. Department of Computer Science, University of Pennsylvania. Technical Report MS-CIS-95, June 1995.
- J. Košecká. Supervisory Control Theory for Autonomous Mobile Agents. Department of Computer Science, University of Pennsylvania. Dissertation Proposal, February 1995.

J. Kořecká. An Alternative Task Supervisor Design. Department of Computer Science, University of Pennsylvania. Technical Report MS-CIS-93-91.

J. Kořecká, R. Bajcsy and M. Mintz. Control of Visually Guided Behaviors. Department of Computer Science, University of Pennsylvania. Technical Report MS-CIS-93-101

J. Kořecká. Control of Discrete Event Systems. Department of Computer Science, University of Pennsylvania. Special Area Exam, Technical Report MS-CIS-92-35.

Sponsored Research Grants

- NSF MRI Award, *Acquisition of an Experimental Testbed for Research and Teaching in Mobile Collaborative Agents*, co-PI, (S. Setia, R. Simon, K. DeJong, J. Kořecká, S. Luke), 09/04 - 09/06, 200K.
- NSF CAREER Award, *Geometric and Appearance Based Methods for Model Acquisition*, PI, 02/04 - 02/09, PI, 500K.
- NSF ITR Collaborative Research, *Efficient Network Simulation Methods for Auctioning and Collaborative Models of Air Traffic Management*, co-PI, (C-H. Chen, G. Donohue, K. Hoffman, J. Shortle, J. Kořecká, B. Mark), 09/03 - 09/06, 600K.
- NSF Grant Robotics and Human Augmentation Program, *Visually Guided Agents*, PI, 09/01 - 09/04, 365K.
- DARPA Augmented Cognition Program, *An Agent Oriented Approach to Augmented Cognition*, startup grant, co-PI, (K. DeJong, S. Luke, J. Kořecká, Z. Duric), 01/01 - 01/02, 500K.
- DARPA Next Generation Internet Program, *Aviation Applications for Next Generation Internet: A Case Study*, co-PI, (G. Donohue, J. Kořecká), 05/00 - 12/00, 90K.

GMU Research Grants

- George Mason University Research Initiative Grant, *Modelling Man-Made Environments*, PI, 01/00 - 12/00.
- George Mason University, *Robotic Research Infrastructure Grant*, PI, 01/01 - 12/01.

Software Project Development

- Structure and Motion Estimation Toolkit. Sample code available at the book's website <http://vision.ucla.edu/MASKS>.
- Developed code for feature tracking in the video sequence, which I use in my research and vision course exercises.

Professional Activities

- **Associate Editor:** International Journal of Computer Vision (January 2004 - present), IEEE Transactions on Pattern Recognition and Machine Intelligence (May 2007- present), IEEE Transactions on Robotics and Automation (September 2002 - September 2005)

- **Journal Reviewer:** International Journal of Computer Vision, Computer Vision, Graphics and Image Processing, IEEE Transactions on Robotics and Automation, Autonomous Robots, IEEE Transaction on Pattern Recognition and Machine Intelligence, Computer Vision and Applications, Image and Vision Computing, IEEE/ASME Transactions on Mechatronics, Computer Vision and Image Understanding
- **Conference/Workshop Program Committee Member:** Conceptual descriptions from images, European Conference on Computer Vision ECCV'96 Workshop, AAAI 97, IEEE International Conference on Emerging Technologies and Factory Automation EFTA 97, IEEE International Conference on Robotics and Automation 1998,2005 AAAI 1997, 1998, 2004, IJCAI 1999, International Conference on Computer Vision 2000 (Area Chair), 2003, IEEE Computer Vision and Pattern Recognition 2002, 2004, 3DPVT 2004
- **Tutorial/Workshop Organizer**
 - SIGGRAPH, August 2004: Short Course on Multiview Geometry for Image Based Rendering
 - SIGGRAPH, June 2003: Course on Multiview Geometry for Image Based Modeling
 - IEEE Conference on Robotics and Automation, April 2004: Tutorial on 3D Reconstruction and Analysis of Static and Dynamic Scenes
 - IEEE Conference on Robotics and Automation, September 2003: Tutorial on 3D Reconstruction and Analysis of Static and Dynamic Scenes
 - IEEE Conference on Robotics and Automation, May 2000: Tutorial on Structure and Motion Recovery in Computer Vision
 - IEEE Conference on Robotics and Automation, September 2003: Breakthroughs in 3D reconstruction and Motion Analysis Tutorial
 - IEEE Conference on Decision and Control, December 1998, *Special Session on Visual Servoing*
- **Community Service**
 - Presenter at NSF K12 workshop for connecting high school teachers with university researches NSP-PI's; Among the organizers of Young Women in Computing – a meeting with high school counselors and computer science teachers on devising strategies to encourage young woman to take computer science classes (2002)
 - Student mentor at the Berkeley EECS Department, summer SUPERB program (1998, 1999)
 - Student mentor for CRA Distributed Sponsors Program (2000)

Student Supervision

- **Undergraduate Students**
 - Kathy Bartley (Summer 2000)
 - Phanidhar Narra (Summer 2000)
- **Graduate Students**
 - Jeff Thomason (Spring 2001), Master's Project
 - Philip Barber (2001 - 2002), Master's Thesis
 - Martha McJunkin (2001 - 2002), Master's Thesis
 - Cristian Levcovici (2001 - Summer 2002)
 - Xiaolong Yang (Spring 2002 - Spring 2004)
 - Ahohan Zhao (Fall 2003 - Spring 2005)

- Liang Zhou (2002)
- Justin Hayes (Spring 2003)
- **PhD Students**
 - Wei Zhang, (Fall 2000 - Summer 2006)
 - Fayin Li (Fall 2003 - Fall 2005)
- **Postgraduate Students**
 - Marco Zucchelli (Spring 2000)
- **Committee Membership**
 - PhD Thesis committee (Joao Sequeira, Robotics Institute, Lisbon, Portugal), 2002
 - PhD Thesis committee (Jacopo Piazzi, University of Sienna), 2004
 - PhD Thesis committee (Alin Popescu, Dartmouth University), 2004
 - PhD Thesis committee (Rick Heisman, George Mason University), in progress
 - PhD Thesis committee (Liviu Panait, George Mason University), 2006
- **Other Supervision**
 - Robert Blasi - Master's Thesis Supervision, Department of EECS, UC Berkeley, 1997
 - Aisha Walcott - Summer Superb Program, UC Berkeley, 1998

Invited Talks and Seminars Presentations

Computer and Robot Vision Conference, Quebec City, Canada	June 2006
Johns Hopkins University, Baltimore, Center of Imaging Science Seminar	November 2004
Workshop on Vision for Robots, IROS 2004, Sendai Japan	October 2004
Microsoft Research, Cambridge, UK	August 2004
Department of Electrical Engineering, Robotics Group, Sienna, Italy	May 2004
Bay Area Vision Meeting Seminar Series, HP Labs, Palo Alto	Spring 2004
University of Notre Dame, Departmental Seminar Series	November 2003
University of California Davis, Graphics Group Seminar Series	June 2003
Czech Technical University, Prague	May 2002
Thyrenian Conference on Multimedia, Capri	May 2002
INRIA Rhone-Alpes, Seminar Series, Grenoble France	December 2001
Academic Science Institute, Frontiers in Robotics, Tokyo Japan	July 2001
Technical University Graz, Seminar, Austria	July 2001
CFAR Seminar Series, CS Department, University of Maryland, College Park	March 2001
CS Departmental Colloquium, Carnegie Mellon University, Pittsburg	January 2001
Two invited talks at SOSFEM Seminar, Czech Republic	December 2000
Dartmouth College, Computer Science and Mathematics Colloquium, USA	May 2000
MIT AI lab seminar, USA	May 2000

Grasp Lab Lunch, University of Pennsylvania, USA	November 2000
Control and Vision Group Seminar, IST Lisbon, Portugal	June 1999
Vision Seminar, CVUT Prague	June 1999
Seminar Series on Multiview Geometry and Estimation, KTH Stockholm	May 1999
GRASP Lab Seminar, University of Pennsylvania	July 1998
Computer Vision Seminar, Technical University Vienna	May 1998
IEE Society Invited Presentation, Slovak Technical University	December 1997
Informatics Colloquium, Masaryk University Brno	December 1997
PATH Conference, Richmond.	October 1997
Vision and Control Workshop, June 1997, Block Island.	June 1997
Discrete Event and Hybrid Systems Workshop, IEEE Robotics and Automation.	April 1997
Department of Computer Science, Robotics Group, Stanford University.	Feb. 1997
Center for Autonomous Systems, KTH Stockholm, Sweden.	Sept. 1996
Schloss Dagstuhl, Environment Modeling for Sensory Based Robots, Germany.	August 1996
Faculty of Electrical Engineering, Technical University Prague, Czech Republic.	June 1995
Invited Speaker at the Workshop on Intelligent Control, Zakopane, Poland.	June 1993
Invited Speaker at the Workshop on Computational Vision, Stockholm, Sweden.	August 1993
Seminar presentation, Dept. of Computer Science, University of Aalborg, Denmark.	August 1993
Seminar presentation, LIFIA, IMAG, Grenoble, France.	August 1993