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RÉSUMÉ

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CONTACT

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PERSONAL

Place and Date of Birth:	Israel, 4 November, 1953.
Family Status:	Married, 4 children.

ACADEMIC DEGREES

B.Sc. *(summa cum laude)* in Aeronautical Engineering, Technion—Israel Inst. of Technology, 1972–1975, conferred in May 1976.

D.Sc. in Aeronautical Engineering, Technion—Israel Institute of Technology, 1982–1986 *(direct track)*, conferred in August 1986.

ACADEMIC APPOINTMENTS

Since 2006 Holder of the Louis and Helen Rogow Chair in Aeronautical Engineering.

Since 2005 Professor, Dept. of Aerospace Engineering, Technion—Israel Inst. of Technology.

1999–2005 Associate Professor, Dept. of Aerospace Engineering, Technion—Israel Inst. of Technology.

1996–1998 Senior Research Associate, NASA/Goddard Space Flight Center, Greenbelt, Maryland, U.S.A. (U.S. National Academy of Sciences/National Research Council Award).

1991–1999 Senior Lecturer, Dept. of Aerospace Engineering, Technion—Israel Inst. of Technology (with tenure since Dec. 1993).

1988–1991 Lecturer, Dept. of Aerospace Engineering, Technion—Israel Inst. of Technology.

1987–1988 Visiting Assistant Professor, Dept. of Mechanical and Aerospace Engineering, State University of New York at Buffalo.

1986–1987 Research Associate, Dept. of Mechanical and Aerospace Engineering, State University of New York at Buffalo.

1984–1986 Teaching Instructor, Dept. of Aeronautical Engineering, Technion—Israel Inst. of Technology.

1982–1984 Teaching Assistant, Dept. of Aeronautical Engineering, Technion—Israel Inst. of Technology.

PROFESSIONAL EXPERIENCE

- Consulting to Israeli Aerospace Industry/MBT Missile division, 2008–2010.
- Consulting to MoD/RAFAEL—Armament Development Authority, 2002.
- Consulting to MoD/RAFAEL—Armament Development Authority, 2000.
- National Research Council Senior Research Associate at NASA/Goddard Space Flight Center, Greenbelt, Maryland (Guidance, Navigation and Control Center), Aug. 1996–Sept. 1998, spacecraft attitude estimation.
- Consulting to Ministry of Defense, Israel, 1992–2002.
- Consulting to RADA—Electronic Industries Ltd., Israel, 1994, development of tracking and estimation algorithms and code for the Autonomous Combat Evaluation (ACE) pilot flight debriefing system.
- Structural Dynamics and Aeroelasticity Branch, Israeli Air Force, 1975–1981, aeroelastic and structural analysis, ground vibration tests and flight testing.
- F-15 Aircraft Engineering and Aeroelasticity Advanced Studies, McDonnell Aircraft Corporation, St. Louis, Missouri, 1977.

RESEARCH INTERESTS

Optimal Estimation, Information Fusion and Control, with application to aerospace systems. Particular interests: Guidance, Navigation and Control (GN&C) systems; interdisciplinary aerospace systems, including Structural Estimation and Control, Flow Control, and Health Monitoring/Fault Detection and Isolation (FDI) systems.

TEACHING EXPERIENCE

Technion

Introduction to Probability Methods (Undergraduate); Space Seminar (Undergraduate technical elective); Controls Seminar (Undergraduate technical elective); Dynamical Systems (Undergraduate); Control Theory (Undergraduate); System Identification and Parameter Estimation (Graduate); Advanced Methods in Linear Estimation (Graduate); Optimal Control in Aerospace Systems (Graduate); Fundamentals of Estimation Theory (Joint Graduate/Undergraduate technical elective); Stochastic Processes in Aerospace Systems (Joint Graduate/Undergraduate technical elective); Navigation Systems (Joint Graduate/Undergraduate technical elective).

Other

- Graduate Instructor at Technion: Materials Engineering (Undergraduate), Dynamics of Particles and Rigid Bodies (Undergraduate), Automatic Control of Flight Vehicles (Joint Graduate/Undergraduate technical elective), Introduction to Probability Methods (Undergraduate), Dynamical Systems (Undergraduate).
- Systems Analysis (Undergraduate), Dept. of Mechanical and Aerospace Eng., State Univ. of New York at Buffalo, 1987.
- Flight Dynamics (Undergrad./Technical Elective), $4th$ year course, at Dept. of Mechanical and Aerospace Eng., State Univ. of New York at Buffalo, 1987.

- Stability and Vibrations (Graduate), Dept. of Mechanical and Aerospace Eng., State Univ. of New York at Buffalo, 1988.
- Advanced Techniques for Electrical Engineering III (Advanced Mathematics), (Graduate), taught at Bell Aerospace Textron, Buffalo, New York, as part of the *Summer 1988 UB Engineering/Bell Aerospace* Program.
- Estimation Theory (Graduate level), Invited, NASA/Goddard Space Flight Center, Greenbelt, Maryland, 1997/8.
- Fundamentals of Estimation: Theory and Practice (Graduate Level), RAFAEL Advanced Defense Systems, Ltd., Missile Division, 2007; 2013.
- Fundamentals of Estimation: Theory and Practice (Graduate Level), SANDISK Corporation, 2012.

TECHNION ACTIVITIES

- Member, Technion Senate's Standing Committee for Appointment of Distinguished Professors, 2016–2017.
- **Dean, Technion's Faculty of Aerospace Engineering**, 2013–2014.
- Member, Technion Senate's Steering Committee, 2012.
- Member, Panel of Chairs of Technion Senate's Professional Committees for Appointment of Tenured and Senior Faculty, 2010–2012.
- Technion Senate's Graduate Degrees Review Committee, 2009.
- Technion Senate's Standing Committee for Appointment of Tenured and Senior Faculty, December 2008–December 2010.
- Member, Technion's Autonomous Systems Program (TASP), since 2008.
- Technion Senate: Elected Member, 2006–2012, 2015–2016; ex officio member, 2013–2014.
- Technion Academic Assembly: member since 2005.
- Member, Technion's Computing Committee, 2003–2005.
- Judge, Technion's Academic Court for Students, 2001–2005.
- Member, Technion's Asher Space Research Institute (ASRI), since 1998.
- Head, Dept. Office for Undergraduate Studies, 1998–2000.
- Judge, Technion's Academic Court for Faculty, 1991–1996.
- Head, Technion's Philadelphia Flight Control Laboratory, 1993–1996.
- Member, interviewing panel for Technion's Excellence Program, since its inception (1993).
- Member, Inter-Departmental Committee for Graduate Studies in Quality Assurance and Reliability, Technion, 1990.

DEPARTMENTAL ACTIVITIES

- Member, Faculty Search Committee, 2009–2012.
- Member, Academic Development Committee, 2005, 2009–2012, 2015 –present (Chair, 2013–2014).
- Member, Graduate Studies Committee, 1998–2001, 2005, 2007, 2009–2012, 2015 – present.
- Head, Computer Affairs, 2003–2005.
- Member, Computer Committee, 2001–2003.
- Member, Curriculum Committee, 1992–1993 and 1998–2004 (Chair, 1998–2000).
- Coordinator, Department's Relations With Youth and Student Candidates, 1989–1992.

PUBLIC PROFESSIONAL ACTIVITIES

National Committees

- *ad hoc* Search Committee for Head of the Israeli Civil Aviation Authority (CAA), 2014 (ex officio as Dean of Aerospace Engineering, by appointment of the Israeli Government).

University and College Promotion Committees

- Tal-Aviv University
- Ort Braude College of Engineering

Editorship and Board Membership

- Chair, Israeli Chapter of IEEE Aerospace and Electronic Systems Society, 2010 – present.
- **Member of Board of Governors**, IEEE Aerospace and Electronic Systems Society (AESS), 2008–2010.
- **Founding Technical Editor for Guidance and Control Systems**, IEEE *Transactions on Aerospace and Electronic Systems*, April 2005 – May 2011.
- Member of the National Board, *Israeli Society of Aeronautics and Astronautics*, 2004–2009.
- *Israeli Association for Automatic Control* [Israeli National Member Organization of the *International Federation of Automatic Control* (IFAC)]: **President**, 2003–2008; Member of the Executive Council, 1993–1996 and 2000–2008.
- Member, *Guidance, Navigation and Control* Technical Committee of the American Institute of Aeronautics and Astronautics (AIAA), 2002–2008 (Publication Subcommittee chair; Liaison to *AIAA Journal of Guidance, Control and Dynamics*; Liaison to *IEEE Transactions on Aerospace and Electronic Systems*; Best Paper Award subcommittee, *Guidance, Navigation and Control Conference*: Member, 2003, 2005; Chair, 2004).
- International Advisor (member of the editorial board), AIAA *Journal of Guidance, Control and Dynamics*, 2002–2009.

Editorship of Books

- Editor (with D. Choukroun, J. Thienel and M. Idan), *Advances in Estimation, Navigation, and Spacecraft Control*, Selected Papers of the Itzhack Y. Bar-Itzhack Memorial Symposium on Estimation, Navigation, and Spacecraft Control. Springer-Verlag, Berlin Heidelberg 2015. ISBN: 978-3-662-44784-0.

- Editor (with John L. Crassidis, John L. Junkins, Kathleen C. Howell, and Julie K. Thienel), *Proceedings of The F. Landis Markley Astronautics Symposium*, Advances in the Astronautical Sciences, Vol. 132, American Astronautical Society, San Diego, CA, 2008.

Refereeing Work

Journals. Numerous journals, including: IEEE Transactions on Automatic Control; IEEE Transactions on Aerospace and Electronic Systems; Information Fusion; AIAA Journal of Guidance, Control and Dynamics; Journal of the Astronautical Sciences; IEEE Transactions on Robotics; Aerospace Science and Technology; Journal of Vibration and Control; Journal of Mechanical Systems and Signal Processing; ASME Journal of Mechanisms, Transmissions and Automation in Design; ASME Journal of Vibrations, Acoustics, Stress and Reliability in Design.

Conferences. Numerous conferences, including: IEEE Conference on Decision and Control (CDC); AIAA Guidance, Navigation and Control Conference; IEEE American Control Conference (ACC); Israel Annual Conference on Aerospace Sciences; International Conference on Information Fusion; IEEE International Conference on Control and Applications.

Publishers and Grants. Marcel Dekker Publishers; US-Israel Binational Science Foundation (BSF); Israeli Science Foundation (ISF).

Ph.D. Theses Abroad. Thomas Bak (1999), "Spacecraft Attitude Determination, A Magnetometer Approach", under supervision of Professor Mogens Blanke. Aalborg University, Faculty of Technology and Science, Aalborg, Denmark. Acting as *Official External Opponent* on the Thesis Adjudication Committee.

AIAA Fellow Grade Selection. Peer reviewer for the Aerospace Sciences Applied professional interest category, classes of 2009, 2010, 2011.

Conference Organization

See: **CONFERENCES**.

ACTIVITY AND MEMBERSHIP IN PROFESSIONAL SOCIETIES

- The Institute of Electrical and Electronics Engineers (IEEE), **Fellow** (elected: 2007).

- American Institute of Aeronautics and Astronautics (AIAA), **Fellow** (elected: 2008).

- International Society of Information Fusion (ISIF).

- Israeli Association for Automatic Control (IAAC) [Israeli National Member Organization of the *International Federation of Automatic Control* (IFAC)], **President** 2003–2008.

- Israeli Society of Aeronautics and Astronautics, member of National Board 2004–2009.

FELLOWSHIPS, HONORS AND AWARDS

- **Fellow, American Institute of Aeronautics and Astronautics (AIAA)**, elected in 2008, (*"...for outstanding contributions to optimal estimation theory and information fusion in aerospace guidance, navigation, and control".*)
- **Fellow, Institute of Electrical and Electronic Engineers (IEEE)**, elected in 2007, (*"...for contributions to information fusion and estimation theory for aerospace applications".*)
- **Technion Outstanding Lecturer Awards** (top 4% echelon at the Technion, based on student evaluations):
  - Winter semester 2010/11 (Control Theory)
  - Winter semester 2009/10 (Control Theory)
  - Spring Semester 2008/9 (Dynamic Systems)
  - Winter semester 2008/9 (Control Theory)
  - Spring semester 2007/8 (Dynamical Systems)
  - Winter semester 2007/8 (Control Theory)
  - Spring semester 2006/7 (Dynamical Systems)
- **Citation for Excellence in Teaching** (top 12% echelon at the Technion, based on student evaluations), Winter semester 2006/7.
- **Best Paper Award**, AIAA *Guidance, Navigation and Control Conference*, Providence, Rhode Island, August 16–19, 2004 (Paper No. 71 in the Refereed Conference Papers list).
- **Citation for Excellence in Teaching** (top 15% echelon at the Technion, based on student evaluations), Winter semester 2004/5.
- **Meir Hanin Research Prize**, Technion—Israel Inst. of Technology, 2004 (*"...for his research that has deepened the knowledge on estimation of satellite motion and has yielded new and efficient methods for satellite angular velocity estimation"*).
- **Best Paper Award**, AIAA *Astrodynamics Specialist Conference*, Monterey, California, August 5–8, 2002 (Paper No. 55 in the Refereed Conference Papers list).
- **Raymond and Miriam Klein Research Prize**, Technion—Israel Inst. of Technology, 2002 ("...for his research on *Enhanced Air-to-Air Missile Tracking Using Target Orientation Observations"*).
- **Marcella S. Geltman Memorial Academic Lectureship Award** in Aerospace Engineering, Technion—Israel Inst. of Technology, 1994–1996.
- **Best Presentation Award**, *AIAA Guidance, Navigation and Control Conference*, Monterey, California (Session GNC-24), 1993 (Paper No. 19 in the Refereed Conference Papers list).
- **Best Presentation Award**, *AIAA Guidance, Navigation and Control Conference*, Monterey, California (Session GNC-27), 1993 (Paper No. 20 in the Refereed Conference Papers list).

- **Excellent Teaching Assistant Award**, Department of Aeronautical Engineering, Technion—Israel Inst. of Technology, 1983.
- **Miriam and Aaron Gutwirth Scholarship Award** for Excellence in Graduate Studies, Technion—Israel Inst. of Technology, 1983.
- Included in **Technion President's List of Honors for Scholastic Achievements**, 1975.

GRADUATE STUDENTS

D.Sc./Ph.D. Theses

1. Harley H. Cudney, Ph.D., State University of New York at Buffalo, Dept. of Mechanical and Aerospace Engineering, "Distributed Structural Control Using Multilayered Piezoelectric Actuators", 1989. Supervisor: D. J. Inman, additional supervisor: Y. Oshman.
2. Scott E. Miller, D.Sc., Dept. of Aerospace Engineering, Technion, "Distributed Modal Control of Piezolaminated Anisotropic Planar and Cylindrical Structures", 1995. Primary supervisor: H. Abramovich, additional supervisor: Y. Oshman.
3. Yeshaya Lipman, D.Sc., Dept. of Aerospace Engineering, Technion, "Analysis of Anti-Missile Defense Scenarios Using a Linear Model", 1995 (transferred from J. Shinar).
4. Jonathan Alkahe, Ph.D., Dept. of Aerospace Engineering, Technion, "Damage Detection and Isolation in Helicopters Using Adaptive Estimation", 2002. Primary supervisor: O. Rand, additional supervisor: Y. Oshman.
5. Daniel Choukroun, Ph.D., (**direct track**), Dept. of Aerospace Engineering, Technion, "New Approaches in Attitude Quaternion Estimation", 2003.
   Primary supervisor: I. Y. Bar-Itzhack, additional supervisor: Y. Oshman.
   Currently Senior Lecturer, Dept. of Mechanical Engineering, Ben-Gurion University of the Negev.
6. Ilia Rapoport, Ph.D., Dept. of Aerospace Engineering, Technion, "Optimal Filtering in the Presence of Faults: Algorithms and Performance Measures", 2005.
7. Ilan G. Shaviv, Ph.D., Dept. of Aerospace Engineering, Technion, "A Stochastic Approach to Fusion of Estimation and Guidance", 2008.
8. Avishy Carmi, Ph.D. (**direct track**), Dept. of Aerospace Engineering, Technion, "Sequential Monte Carlo Methods for Spacecraft Attitude and Angular Rate Estimation from Vector Observations", 2008.
   Currently Senior Lecturer, Dept. of Mechanical Engineering, Ben-Gurion University of the Negev.
9. Daniel Sigalov, Ph.D., Inter-Departmental Program for Applied Mathematics, Technion, "State Estimation in Linear Systems with Random Parameters", 2016.
10. Aaron Friedman, Ph.D., Dept. of Aerospace Engineering, Technion, "Reduced System Order and Sensing/Actuation Resolution for Estimation and Control of Transition to Turbulence", in progress (transferred to direct Ph.D. track after having passed Candidacy Examination on 17 November, 2013).
    Primary supervisor: Y. Oshman, additional supervisor: Yaacov Cohen.

11. Igal Gluzman, Ph.D., Dept. of Aerospace Engineering, Technion, "Disturbance Source Identification for Flow Control", in progress (passed Candidacy Examination, 20 January, 2015).
    Primary supervisor: Yaacov Cohen, additional supervisor: Y. Oshman.

M.Sc./M.A. Theses

1. Baruch Menis, M.Sc., Dept. of Aerospace Engineering, Technion, "Motion Estimation via Statistical Filtering of Optical Flow—Theory and Applications", 1992.

2. Michael Isakow, M.Sc., Dept. of Aerospace Engineering, Technion, "Estimation of Aircraft Attitude Based on a Stabilized Payload", 1992.

3. Tal Mendelboim, M.Sc., Dept. of Aerospace Engineering, Technion, "Maximum Likelihood Modal Parameter Identification and Realization of Stochastic Systems Using the Eigensystem Realization Algorithm", 1993.

4. Pavel Davidson, M.Sc., Dept. of Aerospace Engineering, Technion, "Optimal Passive Bearing-Only Target Localization", 1996.

5. Sharon Avrashi, M.Sc., Dept. of Aerospace Engineering, Technion, "Identification of Maneuvering Strategies in an Air-to-Air Missile Versus Aircraft Encounter Using an Adaptive Multiple Model Estimator", 1997. Primary supervisor: Y. Oshman, additional supervisor: J. Shinar.

6. Francois Dellus, M.Sc., Dept. of Aerospace Engineering, Technion, "Estimation of Satellite Angular Velocity Using Sequential Measurements of a Single Inertial Vector", 1998.

7. Ilan Shaviv, M.Sc., Dept. of Aerospace Engineering, Technion, "Optimal Tuning of a Kalman Filter Using Genetic Algorithms", 2001.

8. Daniel Choukroun, M.A., Dept. of Aerospace Engineering, Technion, (transferred to direct Ph.D. track), "New Approaches in Attitude Quaternion Estimation", 2001 (transferred from I. Y. Bar-Itzhack).

9. David Arad, M.Sc., Dept. of Aerospace Engineering, Technion, "Improving the Interception Performance of Air to Air Missiles Using Target Orientation Information", 2002.

10. Ariel Rubanenko, M.Sc., Dept. of Aerospace Engineering, Technion, "State Estimation Using Measurements With Uncertain Time-Tag", 2002. Primary supervisor: Y. Oshman, additional supervisor: H. Rotstein (RAFAEL).

11. Meirav Almogi-Nadler, M.Sc., Dept. of Aerospace Engineering, Technion, "Recognition and Identification of Theatre Ballistic Missile Trajectory During Boost Phase", 2003. Primary supervisor: J. Ben-Asher, additional supervisor: Y. Oshman.

12. Avishy Carmi, M.A., Dept. of Aerospace Engineering, Technion, (transferred to direct Ph.D. track), "Estimation of the Rotation Quaternion Using Particle Filtering", 2005.

13. Liat Bar-Shim'on, M.Sc., Dept. of Aerospace Engineering, Technion, "A Varying-Bandwidth Homing Estimator", 2007.

14. Yizhar Cohen, M.Sc., Dept. of Aerospace Engineering, Technion, "Geometric Approach for Recursive Attitude Estimation from Vector Observations".
Primary supervisor: I. Y. Bar-Itzhack, additional supervisor: Y. Oshman. 2007.

15. Maxim Goldshtein, M.Sc., Dept. of Aerospace Engineering, Technion, "Computer Vision-Based Compensation of Gyro Bias and Scale-Factor Errors".
Primary supervisor: Y. Oshman, additional supervisor: Tzvi Efrati (RAFAEL Advanced Defense Systems Ltd), 2009.

16. Sergey Vichik, M.Sc., Dept. of Aerospace Engineering, Technion, "Covariance Selection, and Algorithms for Distributed Estimation Based on Gaussian Graphical Models", July 2012.

17. Aaron Friedman, M.A., Dept. of Aerospace Engineering, Technion, (transferred to direct Ph.D. track), "Sensing Optimization for State Estimation in Flow Control", 2013.
Primary supervisor: Y. Oshman, additional supervisor: Yaacov Cohen.

18. Matan Yeger, M.Sc., Dept. of Aerospace Engineering, Technion, "Tracking in the Presence of Field-of-View Constraints Using Probabilistic Data Association", 2016.

19. Nitai Stein, M.Sc., Dept. of Aerospace Engineering, Technion, "Cooperative Estimation via Altruism", 2016.

VISITING AND REPATRIATED SCIENTISTS

1. Dr. Naum Chernoguz, Repatriated Scientist, "Optimization of Configuration Strategies for Stochastic Systems State Estimation", August 1991 – July 1994.

2. Dr. Margalit Ronen, on Sabbatical leave from RAFAEL, "Minimal-Parameter Solution to the Orthogonal Matrix Differential Equation Using the Peano-Baker Method", July 1993 – August 1994.

3. Prof. Mark Psiaki, **Lady Davis Fellow**, on Sabbatical leave from Cornell University, "Spacecraft Attitude Rate Estimation From Geomagnetic Field Measurements", February 2001 – July 2001.

4. Dr. Vladimir Turetsky, Repatriated Scientist under Gil'adi Program, "Integrated Guidance and Estimation for Ballistic Missile Defense" (with J. Shinar), October 2001 – September 2010.

5. Prof. David Geller, **Lady Davis Visiting Associate Professor**, on sabbatical leave from Utah State University, "Investigation into Several Important Nonlinear Stochastic Spacecraft GN&C Problems", September 2011 – July 2012.

PUBLICATIONS

Thesis

"Eigenfactor Methods in Optimal Linear Estimation", D.Sc. Dissertation, Department of Aeronautical Engineering, Technion—Israel Inst. of Technology, Haifa, Israel, May 1986 (in Hebrew). Thesis Advisor: Prof. I. Y. Bar-Itzhack.

Refereed Papers in Professional Journals (Published or Accepted/In Print)

1. I. Y. Bar-Itzhack and Y. Oshman, "Attitude Determination from Vector Observations: Quaternion Estimation", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. AES-21, No. 1, January 1985, pp. 128–136.

2. Y. Oshman and I. Y. Bar-Itzhack, "Eigenfactor Solution of the Matrix Riccati Equation—A Continuous Square Root Algorithm", *IEEE Transactions on Automatic Control*, Vol. AC-30, No. 10, Oct. 1985, pp. 971–978.

3. Y. Oshman and I. Y. Bar-Itzhack, "Square-Root Filtering via Covariance and Information Eigenfactors", *Automatica*, Vol. 22, No. 5, Sept. 1986, pp. 599–604.

4. Y. Oshman, D. J. Inman and A. J. Laub, "Square Root State Estimation for Second-Order Large Space Structures Models", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 12, No. 5, Sept.-Oct. 1989, pp. 698–708.

5. Y. Oshman, "Gain-Free Square Root Information Filtering Using the Spectral Decomposition", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 12, No. 5, Sept.-Oct. 1989, pp. 681–690.

6. Y. Oshman, "Maximum Likelihood State and Parameter Estimation via Derivatives of the V-Lambda Filter", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 15, No. 3, May-June 1992, pp. 717–726.

7. Y. Oshman, "Linear Quadratic Stochastic Control Using the Singular Value Decomposition", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 15, No. 4, July-Aug. 1992, pp. 1045–1047.

8. Y. Oshman, "Optimal Sensor Selection Strategy for Discrete-Time State Estimators", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 30, No. 2, April 1994, pp. 307–314.

9. Y. Oshman, "Optimal Sensor Selection Strategy for Discrete-Time Estimators – Reply to Comment by T. H. Kerr", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 31, No. 2, April 1995, pp. 833–834.

10. Y. Oshman, "Optimal Sensor Selection Strategy for Discrete-Time Estimators – Reply to Comment by T. H. Kerr", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 31, No. 3, July 1995, pp. 1166–1167.

11. Y. Oshman and T. Mendelboim, "Maximum Likelihood Realization and Identification of Stochastic Systems", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 17, No. 4, July-Aug. 1994, pp. 692–700.

12. Y. Oshman and B. Menis, "Maximum A Posteriori Image Registration/Motion Estimation", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 17, No. 5, Sept.-Oct. 1994, pp. 1115–1123.

13. S. E. Miller, H. Abramovich and Y. Oshman, "Active Distributed Vibration Control of Anisotropic Piezoelectric Laminated Plates", *Journal of Sound and Vibration*, Vol. 183, No. 5, 1995, pp. 797–817.

14. S. E. Miller, Y. Oshman and H. Abramovich, "Modal Control of Piezolaminated Anisotropic Rectangular Plates: Part 1—Modal Transducer Theory", *AIAA Journal*, Vol. 34. No. 9, Sept. 1996, pp. 1868–1875.

15. S. E. Miller, Y. Oshman and H. Abramovich, "Modal Control of Piezolaminated Anisotropic Rectangular Plates: Part 2—Control Theory", *AIAA Journal*, Vol. 34. No. 9, Sept. 1996, pp. 1876–1884.

16. M. Ronen and Y. Oshman, "A Third-Order, Minimal-Parameter Solution of the Orthogonal Matrix Differential Equation", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 20, No. 3, May-June 1997, pp. 516–521.

17. Y. Lipman, J. Shinar and Y. Oshman, "Stochastic Analysis of the Interception of Maneuvering Antisurface Missiles", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 20, No. 4, July-Aug. 1997, pp. 707–714.

18. S. E. Miller, H. Abramovich and Y. Oshman, "Selective Modal Transducers for Anisotropic Rectangular Plates: Experimental Validation", *AIAA Journal*, Vol. 35. No. 10, Oct. 1997, pp. 1621–1629.

19. Y. Oshman and F. L. Markley, "Sequential Minimal-Parameter Attitude and Attitude-Rate Estimation from Vector Observations", *Journal of the Chinese Society of Mechanical Engineers*, Transactions of the Chinese Institute of Engineers, Series C, Special Issue on "Dynamics and Control", Vol. 19, No. 1, Feb. 1998, pp. 9–23. **Invited Paper**.

20. Y. Oshman and F. L. Markley, "Minimal-Parameter Attitude Matrix Estimation from Vector Observations", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 21, No. 4, July-Aug. 1998, pp. 595–602.

21. Y. Oshman and F. L. Markley, "Sequential Attitude and Attitude-Rate Estimation Using Integrated-Rate Parameters", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 22, No. 3, May-June 1999, pp. 385–394.

22. S. E. Miller, Y. Oshman and H. Abramovich, "Selective Modal Transducers for Piezolaminated Anisotropic Shells", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 22, No. 3, May-June 1999, pp. 455–466.

23. Y. Oshman and F. L. Markley, "Spacecraft Attitude/Rate Estimation Using Vector-Aided GPS Observations", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 35, No. 3, July 1999, pp. 1019–1032.

24. Y. Oshman and P. Davidson, "Optimization of Observer Trajectories for Bearings-Only Target Localization", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 35, No. 3, July 1999, pp. 892–902.

25. Y. Oshman and M. Isakow, "Mini-UAV Attitude Estimation Using an Inertially Stabilized Payload", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 35, No. 4, Oct. 1999, pp. 1191–1203.

26. Y. Oshman and F. L. Markley, "Sequential Gyroless Attitude and Attitude-Rate Estimation from Vector Observations", *Acta Astronautica*, Vol. 46, No. 7, March 2000, pp. 449–463.

27. S. E. Miller, Y. Oshman and H. Abramovich, "Selective Modal Control Theory for Piezolaminated Anisotropic Shells", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 24, No. 4, July-Aug. 2001, pp. 844–852.

28. Y. Oshman, J. Shinar and S. Avrashi Weizman, "Using a Multiple Model Adaptive Estimator in a Random Evasion Missile/Aircraft Encounter", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 24, No. 6, Nov.-Dec. 2001, pp. 1176–1186.

29. T. Shima, Y. Oshman and J. Shinar, "Efficient Multiple Model Adaptive Estimation in Ballistic Missile Interception Scenarios", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 25, No. 4, July-Aug. 2002, pp. 667–675.

30. J. Alkahe, Y. Oshman and O. Rand, "Adaptive Estimation Methodology for Helicopter Blade Structural Damage Detection", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 25, No. 6, Nov.-Dec. 2002, pp. 1049–1057.

31. M. L. Psiaki and Y. Oshman, "Spacecraft Attitude Rate Estimation From Geomagnetic Field Measurements", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 26, No. 2, Mar.-Apr. 2003, pp. 244–252.

32. Y. Oshman and F. Dellus, "Fast Estimation of Spacecraft Angular Velocity Using Sequential Measurements of a Single Directional Vector", *AIAA Journal of Spacecraft and Rockets*, Vol. 40, No. 2, Mar.-Apr. 2003, pp. 237–247.

33. J. Alkahe, O. Rand and Y. Oshman, "Helicopter Health Monitoring Using an Adaptive Estimator", *The Journal of the American Helicopter Society*, Vol. 48, No. 3, July 2003, pp. 199–210.

34. M. Almogi-Nadler, Y. Oshman and J. Z. Ben-Asher, "Boost-Phase Identification of Theatre Ballistic Missiles Using Radar Measurements", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 27, No. 2, Mar.-Apr. 2004, pp. 197–208.

35. P. Tortora, Y. Oshman and F. Santoni, "Spacecraft Angular Rate Estimation from Magnetometer Data Only Using an Analytic Solution of Euler's Equations", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 27, No. 3, May-June 2004, pp. 365–373.

36. D. Choukroun, I. Y. Bar-Itzhack and Y. Oshman, "Optimal REQUEST Algorithm for Attitude Determination", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 27, No. 3, May-June 2004, pp. 418–425.

37. Y. Oshman and D. Arad, "Enhanced Air-to-Air Missile Tracking Using Target Orientation Observations", *AIAA Journal of Guidance, Control and Dynamics*, Vol. 27, No. 4, July-Aug. 2004, pp. 595-606.

38. I. Rapoport and Y. Oshman, "A New Estimation Error Lower Bound for Interruption Indicators in Systems with Uncertain Measurements", *IEEE Transactions on Information Theory*, Vol. 50, No. 12, Dec. 2004, pp. 3375–3384.

39. I. Rapoport and Y. Oshman, "A Cramér-Rao-Type Estimation Lower Bound for Systems with Measurement Faults", *IEEE Transactions on Automatic Control*, Vol. 50, No. 9, Sept. 2005, pp. 1234–1245.

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78. Y. Oshman and A. Carmi, "Adaptive Estimation of Spacecraft Attitude from Vector Observations Using a Quaternion Particle Filter", American Astronautical Society (AAS) *Malcolm D. Shuster Astronautics Symposium*, Grand Island, New York, June 13–15, 2005 (Paper No. AAS-05-464). **Invited**.

79. A. Carmi and Y. Oshman, "Robust Spacecraft Angular-Rate Estimation from Vector Observations Using Fast Interlaced Particle Filtering", AIAA *Guidance, Navigation and Control Conference*, San Francisco, California, August 15–18, 2005 (Paper No. AIAA-2005-6399).

80. D. Choukroun, H. Weiss, I. Y. Bar-Itzhack and Y. Oshman, "Quaternion Estimation from Vector Observations Using a Matrix Kalman Filter", AIAA *Guidance, Navigation and Control Conference*, San Francisco, California, August 15–18, 2005 (Paper No. AIAA-2005-6397).

81. I. G. Shaviv and Y. Oshman, "Guidance Without Assuming Separation", AIAA *Guidance, Navigation and Control Conference*, San Francisco, California, August 15–18, 2005 (Paper No. AIAA-2005-6154).

82. I. G. Shaviv and Y. Oshman, "Fusion of Estimation and Guidance Using Sequential Monte Carlo Methods", Proceedings of IEEE *Conference on Control Applications*, Toronto, Canada, August 28–31, 2005, pp. 1361–1366. **Invited**.

83. A. Carmi and Y. Oshman, "Vector Observations-Based Gyroless Spacecraft Attitude/ Angular Rate Estimation Using Particle Filtering", AIAA *Guidance, Navigation and Control Conference*, Keystone, Colorado, August 21–24, 2006 (Paper No. AIAA-2006-6597).

84. I. G. Shaviv and Y. Oshman, "Estimation-Guided Guidance", AIAA *Guidance, Navigation and Control Conference*, Keystone, Colorado, August 21–24, 2006. **Invited.** (Paper No. AIAA-2006-6217).

85. Y. Cheng, F. L. Markley, J. L. Crassidis, and Y. Oshman, "Averaging Quaternions", AAS/AIAA *Space Flight Mechanics Meeting*, Sedona, Arizona, January 28–February 1, 2007.

86. M. Goldshtein, Y. Oshman, T. Efrati, "Computer Vision-Based Compensation of Gyro Bias and Scale-Factor Errors," *10th International Conference on Information Fusion (FUSION 2007)*, Quebec City, Canada, July 9–12, 2007.

87. A. Carmi and Y. Oshman, "On the Covariance Singularity of Quaternion Estimators", AIAA *Guidance, Navigation and Control Conference*, Hilton Head, South Carolina, August 20–23, 2007 (Paper No. AIAA-2007-6814).

88. A. Carmi and Y. Oshman, "On the Observability of the Spacecraft Attitude and Angular Rate Estimation Problem", AAS *F. Landis Markley Astronautics Symposium*, Cambridge, Maryland, June 29–July 2, 2008.

89. M. Goldshtein, Y. Oshman, and T. Efrati, "Seeker Gyro Calibration Via Model-Based Fusion of Visual and Inertial Data", *Guidance, Navigation and Control Conference*, Honolulu, Hawaii, August 18–21, 2008. (Paper No. AIAA 2008-7424).

90. V. Shaferman and Y. Oshman, "Cooperative Interception in a Multi-Missile Engagement", *Guidance, Navigation and Control Conference*, Chicago, IL, August 10–13, 2009. (Paper No. AIAA 2009-5783).

91. D. Sigalov and Y. Oshman, "State Estimation in Hybrid Systems With a Bounded Number of Mode Transitions", *13th International Conference on Information Fusion (FUSION 2010)*, Edinburgh, United Kingdom, 26–29 July 2010.

92. D. Sigalov and Y. Oshman, "A New Formulation of Fault-Tolerant Estimation Problems and Some Solutions", *2010 IEEE 26th Convention of Electrical and Electronics Engineers in Israel (IEEEI 2010)*, Eilat, Israel, 17–19 November, 2010.

93. D. Sigalov and Y. Oshman, "Linear Optimal Estimation Problems in Systems with Actuator Faults", *14th International Conference on Information Fusion (FUSION 2011)*, Chicago, IL, July 5–8, 2011.

94. D. Sigalov and Y. Oshman, "Tracking Maneuvering Targets with a Soft Bound on the Number of Maneuvers", *14th International Conference on Information Fusion (FUSION 2011)*, Chicago, IL, July 5–8, 2011.

95. S. Vichik and Y. Oshman, "Optimal Covariance Selection for Estimation Using Graphical Models", *American Control Conference (ACC 2011)*, San Francisco, CA, June 29 – July 1, 2011.

96. D. Sigalov and Y. Oshman, "Linear Optimal State Estimation in Systems with Independent Mode Transitions", *50th IEEE Conference on Decision and Control*, Orlando, FL, December 12–15, 2011.

97. D. K. Geller and Y. Oshman, "Negative Collision Measurements in Position/Velocity State Estimation", *52nd Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, February 29 – March 1, 2012.

98. D. Sigalov, N. Leiter, N. Kalish, Y. Oshman, "State Estimation in Hybrid Systems with a Bounded Number of Mode Transitions in the Presence of Spurious Measurements", *15th International Conference on Information Fusion*, Singapore, July 9–12, 2012.

99. D. Sigalov, T. Michaeli, Y. Oshman, "A Unified Approach to State Estimation Problems Under Data and Model Uncertainties", *15th International Conference on Information Fusion*, Singapore, July 9–12, 2012.

100. D. Sigalov, T. Michaeli, Y. Oshman, "Tracking a Splitting Target in Clutter Using the IMM Methodology", *27th Convention of Electrical and Electronics Engineers in Israel (IEEEI 2012)*, Eilat, Israel, November 14–17, 2012.

101. D. Sigalov and Y. Oshman, "Modeling Maneuvering Targets with GARCH", *53rd Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, March 6–7, 2013.

102. A. J. Friedman, Y. Oshman, J. Cohen, "System Order and Sensing Resolution Reduction for Subcritical Incompressible Plane Poiseuille Flow State Estimation", *53rd Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, March 6–7, 2013.

103. D. Sigalov, T. Michaeli, Y. Oshman, "Tracking an Extended Maneuvering Target Using a Novel Modeling of Systems with Random Parameters", *54th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, February 19–20, 2014.

104. A. J. Friedman, Y. Oshman, J. Cohen, "Balanced Truncation of System Models Augmented with Aliased Wave-Number Pairs for Plane Poiseuille Flow State Estimation", *54th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, February 19–20, 2014.

105. A. J. Friedman, Y. Oshman, J. Cohen, "Balanced Truncation of System Models Using Reduced Resolution Sensing for Plane Poiseuille Flow State Estimation", *7th AIAA Flow Control Conference*, Atlanta, Georgia, 16–20 June, 2014 (within AVIATION 2014).

106. D. Sigalov, T. Michaeli, Y. Oshman, "Simultaneous Tracking and Data Association in an Extended Maneuvering Target Using the IMM Methodology", *17th International Conference on Information Fusion*, Salamanca, Spain, 7–10 July, 2014.

107. D. Sigalov and Y. Oshman, "On a Possible Division by Zero in the Interacting Multiple Model (IMM) Filter", *28th Convention of Electrical and Electronics Engineers in Israel (IEEEI 2014)*, Eilat, Israel, December 3–5, 2014.

108. A. J. Friedman, Y. Oshman, J. Cohen, "Transition Thresholds for Plane Poiseuille Flow Using Selective Wave-Number Pair Control", *55th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, February 25–26, 2015.

109. D. Sigalov and Y. Oshman, "A Novel Method for GPS Navigation in the Presence of Spoofing", *55th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, February 25–26, 2015.

110. N. Stein and Y. Oshman, "Altruistic Approaches to Cooperative Estimation", *56th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, March 9–10, 2016.

111. M. Yeger and Y. Oshman, "Target Tracking in the Presence of Field-Of-View Constraints", *56th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, March 9–10, 2016.

112. I. Gluzman, J. Cohen and Y. Oshman, "Disturbance Source Identification for Flow Control: Problem Formulation for Infinitesimal Disturbances", *56th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, March 9–10, 2016.

113. I. Gluzman, J. Cohen and Y. Oshman, "Statistical Calibration Via Gaussianization in Hot-Wire Anemometry", *56th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, March 9–10, 2016.

114. V. Shaferman and Y. Oshman, "Cooperative Interception Via Staggering and Information Sharing", *56th Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel, March 9–10, 2016.

CONFERENCES

Plenary and Invited Talks

- 2013 International Workshop on Information Fusion, Xi'an Jiaotong University, Xi'an, P.R. China, 29-30 July, 2013. Plenary Lecture: "A Broader View of State Estimation Problems in Systems with random Coefficients".

- 2007 International Conference on Control, Automation, and Systems (ICCAS 2007), COEX (Convention and Exhibition Center), Seoul, Korea, October 17–20, 2007 (Plenary Lecture: "An Information Fusion Approach to Missile Guidance").

- AIAA *Guidance, Navigation and Control Conference*, Hilton Head, South Carolina, August 20–23, 2007, (Plenary Lecture: "Navigation, Filtering, and Attitude: A Tribute to Professor Itzhack Y. Bar-Itzhack").

- AIAA *Guidance, Navigation and Control Conference*, Keystone, Colorado, August 21–24, 2006, (Special Session on *Guidance and Control Techniques for Unmanned Aerial Systems and Missiles*).

- IEEE *Conference on Control Applications*, Toronto, Canada, August 28–31, 2005 (Special Session on *Missile Guidance and Estimation*).

- American Astronautical Society (AAS) *Malcolm D. Shuster Astronautics Symposium*, Grand Island, New York, June 13–15, 2005 (Specialist Symposium, by invitation only).

- First *Swedish-Israeli Control Conference*, Stockholm, Sweden, September 27–28, 2004 (Specialist workshop).

- 16th IFAC *Symposium on Automatic Control in Aerospace*, St. Petersburg, Russia, June 14–18, 2004 (Special Session on *Missile Guidance, Navigation and Control*).

- 2003 *American Control Conference*, Denver, Colorado, June 4–6, 2003 (Special Session on *Guidance*).

- *Workshop on Estimation, Tracking and Fusion: A Tribute to Yaakov Bar-Shalom*, Naval Postgraduate School, Monterey, California, May 17, 2001. (Specialist workshop).

- 28th *Israel Conference on Mechanical Engineering*, Beer-Sheva, Israel, June 2000 (Invited paper).

- *James H. Belfer Memorial Symposium on Modeling of Structures and Mechanical Systems*, Haifa, Israel, May 8–10, 1995 (Specialist workshop).

- *American Control Conference*, Pittsburgh, Pennsylvania, 21-23 June, 1989. Speaker: H. H. Cudney (Special session).

- IEEE *International Conference on Control and Applications (ICCON)*, Jerusalem, Israel, April 3–6, 1989 (Invited paper).

- 27th IEEE *Conference on Decision and Control*, Austin, Texas, Dec. 7–9, 1988 (Special session on Estimation, in memory of Gerald J. Bierman).

Conference Organization

- *IEEE International Conference on the Science of Electrical Engineering (ICSEE)*, Eilat, Israel, November 16–18, 2016. Member, Technical Program Committee.
- *Itzhack Y. Bar-Itzhack Memorial Symposium on Estimation, Navigation, and Spacecraft Control*, October 14–17, 2012, Haifa, Israel. Organizer and General Chair.
- *International Conference on Information Fusion*:
  - 15th Conference (Fusion 2012), Singapore, 9–12 July 2012. Member, Technical Program Committee.
  - 14th Conference (Fusion 2011), Chicago, Illinois, 5–8 July 2011. Member, Technical Program Committee, and Session Chair, "Navigation 2".
  - 13th Conference (Fusion 2010), Edinburgh, Scotland, 26–29 July 2010. Member, Technical Program Committee, and Session Chair, "Tracking Applications I (RF)".
  - 12th Conference (FUSION 2009), Seattle, Washington, 6-9 July 2009. Member, Technical Program Committee.
  - 10th Conference (FUSION 2007), Quebec, Canada, 9-12 July 2007. Member, International Program Committee.
  - 9th Conference (FUSION 2006), Florence, Italy, 10-13 July 2006. Member, International Program Committee.
  - 7th Conference (FUSION 2004), Stockholm, Sweden, June 28–July 1, 2004. Member, International Program Committee.
  - 5th Conference (FUSION 2002), Annapolis, Maryland, July 2002. Member, International Program Committee.
- *American Control Conference (ACC 2011)*, June 29–July 1, 2011, San Francisco, CA. Session Chair, "Reduced Order Modeling".
- *AIAA Guidance, Navigation and Control Conference*, 2–5 August 2010, Toronto, Canada. Session Chair "Estimation Theory and Applications".
- American Astronautical Society *F. Landis Markley Astronautics Symposium*, Cambridge, Maryland, June 29–July 2, 2008. Member, Organizing Committee.
- 9th Biennial ASME *Conference on Design and Analysis (ESDA-2008)*, Haifa, Israel, 7–9 July 2008. Aerospace Track Chair.
- *International Symposium on Guidance and Differential Games: A Tribute to Professor Josef Shinar (in honor of his 75th birthday)*, November 8, 2007, Technion City, Haifa, Israel. Chair, Organizing Committee.
- AIAA *Guidance, Navigation and Control Conference*, August 2007. Technical Area Chair (Member, International Program Committee) for "Novel Navigation, Estimation and Tracking Methods".
- American Astronautical Society *Malcolm D. Shuster Astronautics Symposium*, Grand Island, New York, June 13–15, 2005 (Specialist Symposium). Session Chairman.

- AIAA *Guidance, Navigation and Control Conference*, San Francisco, California, August 2005. Technical Area Chair (Member, International Program Committee) for "Control Theory, Analysis and Design" and Member, Best Paper Committee.
- 2005 *American Control Conference* (ACC'05), Portland, Oregon, June 2005. Member, International Program Committee.
- AIAA *Guidance, Navigation and Control Conference*, Providence, Rhode Island, August 2004. Session Chairman of "Navigation, Estimation and Guidance", and Chairman, Best Paper Committee.
- IAAC symposium on "Advanced Methods and Applications in Estimation and Identification", Herzlia, Israel, March 29, 2004. Organizer.
- AIAA *Guidance, Navigation and Control Conference*, Austin, Texas, August 2003. Technical Area Chair (Member, International Program Committee) for "Guidance, Navigation and Tracking", Session Chairman of "Tracking and Guidance", Member, Best paper committee.
- AIAA *Guidance, Navigation and Control Conference*, Monterey, CA, August 5–8, 2002. Session Chairman.
- AIAA *Guidance, Navigation and Control Conference*, Montreal, Canada, August 6–9, 2001. Session Chairman.
- IAAC "Control Applications in Space" Symposium, Herzlia, Israel, May 24, 2001. Organizer.
- 50th *International Astronautical Congress*, Amsterdam, The Netherlands, October 4–8, 1999. Rapporteur, Attitude Dynamics and Control Session, Astrodynamics Symposium.
- AIAA *Guidance, Navigation and Control Conference*, Boston, Massachusetts, August 10–12, 1998. Session Chairman.
- 48th *International Astronautical Federation* (IAF) Congress, Turin, Italy, October 6–10, 1997. Rapporteur, Attitude Control Session, Astrodynamics Symposium.
- IAAC "Computational Methods in Control" Symposium, Herzlia, Israel, 20 May, 1996. Organizer.
- *National Graduate Student Control Theory Workshop*, Technion, Israel, April 5, 1995. Organizer.
- IAAC "Identification and Estimation" Symposium, Herzlia, Israel, June 21, 1994. Organizer.
- IEEE *International Conference on Control and Applications* (ICCON), Jerusalem, Israel, April 3–6, 1989. Member, International Program Committee.
- *Israel Annual Conference on Aerospace Sciences*, Tel-Aviv and Haifa, Israel:
  - 55th Conference, February 25–26, 2015. Member, Organizing Committee.
  - 54th Conference, February 2014. Member, Organizing Committee.

– 53rd Conference, March 2013. Member, Organizing Committee, and Member, Program Committee.

– 52nd Conference, February 2012. Member, Organizing Committee, Treasurer, and Member, Program Committee.

– 51th Conference, February 2011. Member, Organizing Committee, Treasurer, and Member, Program Committee.

– 50th Conference, February 2010. Member, Program Committee.

– 49th Conference, March 2009. Member, Program Committee.

– 48th Conference, February 2008. Member, Program Committee.

– 45th Conference, February 2005. Member, Program Committee and Session Chairman of "GN&C Systems".

– 44th Conference, February 2004. Member, Program Committee.

– 43rd Conference, February 2003. Member, Program Committee and Session Chairman.

– 42nd Conference, February 2002. *Chairman, Program Committee; Member, Organizing Committee.*

– 41st Conference, February 2001. Member, Program Committee.

– 40th Conference, February 2000. Chairman of an Invited Lecture Session.

– 35th Conference, February 1995. Member, Program Committee and Session Chairman.

– 34th conference, February 1994. Member, Program Committee.