

Name: Michael Winokur, Ph.D.

HIT – Holon Institute of Technology
Date: July 2024

CURRICULUM VITAE

1. Personal Details

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2. Higher Education

A. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree	Year of Approval of Degree
1979-1982	Imperial College University of London, England	Ph.D. + DIC in Electrical and Systems Engineering	15/12/1982
1976-1979	Technion – Israel Institute of Technology	M.Sc. in Nuclear Engineering	11/9/1979
1973-1976	Technion – Israel Institute of Technology	B.Sc. in Electrical Engineering Summa Cum Laude	8/9/1976
1970-1972	Faculty of Engineering, University of the Republic, Montevideo, Uruguay	Engineering (basic cycle)	Transferred to Technion in 1973

B. Further Studies

Period of Study	Name of University	Subject	Degree or Professional Licence	Date of Award
12/2000	The Software Engineering Institute, Carnegie Mellon University, Pittsburgh, USA	CMMI Staged Representation	Lead Assessor in the SEI Appraiser Program for a CMM-Based Appraisal for Internal Process Improvement (CBA IPI) - Update	12/2000

B. Further Studies, contd.

Period of Study	Name of University	Subject	Degree or Professional Licence	Date of Award
8/1997	Battelle, Columbus, OH, USA	16th Annual International Program in R&D Management	R&D Senior Management	8/1997
7/1996	The Software Engineering Institute, Carnegie Mellon University, Pittsburgh, USA	Software Process Improvement	Lead Assessor	7/1996

3. Academic Ranks and Tenure in Institutes of Higher Education

Dates	Name of Institution and Department	Rank/Position
02/2024-	HIT – Holon Institute of Technology, Faculty of Engineering; Faculty of Industrial Engineering and Technology Management, Holon, Israel	Associate Professor of the Practice
3/2018-present	HIT – Holon Institute of Technology, Faculty of Industrial Engineering and Technology Management, Holon, Israel	Head – Systems Engineering
6/2018-9/2019	HIT – Holon Institute of Technology, Faculty of Industrial Engineering and Technology Management, Holon, Israel	Dean
3/2018-6/2018	HIT – Holon Institute of Technology, Faculty of Industrial Engineering and Technology Management, Holon, Israel	Deputy Dean
10/2013-9/2019	HIT – Holon Institute of Technology, Faculty of Engineering; Faculty of Industrial Engineering and Technology Management, Holon, Israel	Equivalent to Associate Professor
10/2013-2/2018	HIT – Holon Institute of Technology, Faculty of Engineering	Head – Embedded Systems

3. Academic Ranks and Tenure in Institutes of Higher Education, contd.

Dates	Name of Institution and Department	Rank/Position
11/2011-1/2013; 10/2001-7/2002	HIT – Holon Institute of Technology, Faculty of Engineering; Faculty of Industrial Engineering and Technology Management, Holon, Israel	Adjunct Senior Lecturer
1999-2/2018	Technion – Israel Institute of Technology, Haifa, Israel	Adjunct Senior Lecturer: M.Sc. Systems Eng.
2009-2010	Afeka Tel-Aviv Academic College of Engineering, Dept. Software Engineering, Tel-Aviv, Israel	Project Advisor
1995-2009	Tel Aviv University, Dept. Computer Engineering, Tel-Aviv, Israel	Adjunct Senior Lecturer (Gimel): Joint EE – Computer Science B.Sc.
1990-1993	Tel Aviv University, School of Management, Tel-Aviv, Israel	External Lecturer
1980-1982	Imperial College, Dept. Electrical Engineering, London, UK	Teaching Assistant
1975-1979	Technion – Israel Institute of Technology, Dept. Electrical, Aeronautical Engineering and Mathematics, Haifa, Israel	Teaching Assistant
1974-1979	ORT , Haifa Neve David and IAF Technical School, Israel	Teacher: 13th grade at high school (Yud Gimmel) Technician's degree

4. Scholarly Positions and Activities outside the Institution**a. Committees:**

2015	Progress Review, Afeka, M.Sc. in Engineering and Management of Infrastructure Systems - The Council for Higher Education of Israel, Israel
2014	Progress Review Committee Member, Afeka, M.Sc. in Engineering and Management of Service Systems - The Council for Higher Education of Israel, Israel
2013	Accreditation Committee Member, Afeka M.Sc. in Engineering and Management of Infrastructure Systems - The Council for Higher Education of Israel, Israel
2012	Accreditation Committee Member, Afeka, M.Sc. in Engineering and Management of Service Systems - The Council for Higher Education of Israel, Israel
2006-2008	Member of International Technical Committee - INCOSE, International Council on Systems Engineering, USA (Tampa, Las Vegas, Washington DC)
1999-present	Member, Industrial Steering Committee - Technion – Israel Institute of Technology, M.Sc. in Systems Engineering, Haifa, Israel

4. Scholarly Positions and Activities outside the Institution**a. Committees:**

1997-2002 Committee Member of Software Quality Experts - Israel National Standards Institute, Israel

b. Chapters:

2004-2005 Israel Chapter Chairman - INCOSE_IL, Israeli Chapter of INCOSE the International Council on Systems Engineering, Israel

2001-2002 Founding Member - participation in the establishment of the Israel Chapter, INCOSE_IL, Israeli Chapter of INCOSE the International Council on Systems Engineering, Israel

1998-2000 Israel Chapter Chairman - Israel Chapter of the IEEE Computer Society, Israel

c. Academic Guest:

17-19/7/2019 Official Academic Guest – one of three distinguished guests honored by the University SASE 2019: Argentine Symposium on Embedded Systems, National University of Rosario, Santa Fe, Argentina,

d. Conferences:

2006-present Industrial participant – ARTIST2, European Network of Excellence on Embedded Systems Design

2000-present Yearly Systems Engineering Symposium (in memory of Yossi Levin), jointly organized by Rafael, IAI and the Technion, Israel

e. Miscellaneous:

2008 Examiner for Ph.D. candidate Iris Dallal, Technion – Israel Institute of Technology, Industrial Engineering, Haifa, Israel

1995 Member of Israel industrial/academic delegation headed by Chief Scientist - S. Gleitman, Israel-Singapore Joint R&D Fund Foundation, Singapore

5. Participation in Scholarly Conferences**a. Active Participation in Israel**

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
14/9/2022	Annual INCOSE_IL Conference on Systems Engineering: The Full Life Cycle of Systems Engineering	Herzliya, Israel		Member of Program Committee
16-17/3/2021 [online]	The 11th Israeli International Conference on Systems Engineering: Systems Engineering in the Age of Disruptions and Transformations	Israel		Member of Program Committee; Session Chair

5. Participation in Scholarly Conferences, contd.**a. Active Participation in Israel**

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
2/6/2020	Technology and Society in the Digital Age - Challenges and Opportunities	HIT, Holon, Israel		Symposium Chair
26-28/3/2019	INCOSE IL 2019 – The 10th Israeli International Conference on Systems Engineering	Herzliya, Israel		Member of Program Committee
21/6/2017	4th Annual Israel Embedded Systems Symposium	HIT, Holon, Israel		Symposium and Technical Committee Chairman; Summary and concluding remarks
30/5/2016	3rd Annual Israel Embedded Systems Symposium	HIT, Holon, Israel		Symposium Chairman
20/5/2014	2nd Annual Israel Embedded Systems Symposium	HIT, Holon, Israel		Symposium Chairman
7/4/2013	1st Annual Israel Embedded Systems Symposium	HIT, Holon, Israel		Symposium Chairman
12-13/6/2012	IEEE International Conference on Software Science, Technology and Engineering, (SWSTE 2012)	Herzliya, Israel	Looking back 10 years from now (M. Winokur)	Panel; Member of Technical Committee
15-16/6/2010	IEEE International Conference on Software Science, Technology and Engineering (SWSTE 2010)	Herzliya, Israel	Impact of smarter devices and broadband capacity (M. Winokur)	Closing panel; Member of Technical Committee
2006-2013	International SWSTE (Software Science Technology and Engineering) Conference organized by the Israel Chapter of the Computer Society	Israel		Member of Technical Committee

5. Participation in Scholarly Conferences, contd.**a. Active Participation in Israel**

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
2006-2013; 2002-2004	International Conference on Systems Engineering, INCOSE_IL	Israel		Member of Technical Committee
2005	3rd International Conference on Systems Engineering, INCOSE_IL	Israel		Conference Chairman
30/3-3/4/1998	International Conference and Workshop: Engineering of Computer Based Systems	Jerusalem, Israel		Program Chair; Member of Steering Committee
5/1991	5th Israel Conference on Computer Systems and Software Engineering	Israel		Member of Technical Committee
6/1988	3rd Israel Conference on Computer Systems and Software Engineering	Tel-Aviv, Israel		Member of Technical Committee

b. Active Participation Abroad

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
16-18/11/2022	ICECCME 2022 – 2nd International Conference on Electrical, Computer, Communications and Mechatronics Engineering	Maldives	Parallel Session D-II: Modelling	Session Chair
10-14/6/2018	The 7th Mediterranean Conference on Embedded Computing (MECO2018)	Budva, Montenegro		Session Chairman

5. Participation in Scholarly Conferences, contd.**b. Active Participation Abroad, contd.**

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
9-12/7/2012	22nd Annual International Symposium of the International Council on Systems Engineering (INCOSE 2012), and the 8th Biennial European Systems Engineering Conference 2012 (EuSEC 2012)	Rome, Italy	Systems of systems research (M. Winokur)	Closing panel
2008	INCOSE, International Conference	Utrecht, Holland	DANSE one-day workshop	Coordinator

c. Organization of Conferences or Sessions in Israel

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
18-19/6/1997	The Eighth Israeli Conference on Computer Systems and Software Engineering	Herzliya, Israel		Co-Chair of Organizing Committee
12-13/6/1996	The 7th Israel Conference on Computer Systems and Software Engineering	Herzliya, Israel		Chairperson of Organizing Committee

d. Organization of Conferences or Sessions Abroad

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
26-28/2/2020	The 21st International Conference on Industrial Technology (ICIT 2020)	Buenos Aires, Argentina	Special session on: Technology development and society – Opportunities and conflicts Special session on: Agro industry 4.0	Organizer Organizer and Chair

5. Participation in Scholarly Conferences, contd.**d. Organization of Conferences or Sessions Abroad**

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
22/7/2019	Joint HIT-UNSAM-UBP (Holon Institute of Technology-National University of San Martin -The University Blaise Pascal) Workshop: Professional Updating in Embedded Systems – Challenges in Present Day Technology Management	National University of San Martin, Buenos Aires, Argentina		Organizer; Member of Program Committee
2004	INCOSE, European Conference	Toulouse, France		Member of Organizing Committee

e. Oral and Poster Presentations in Israel

9/2022	Annual INCOSE_IL Conference on Systems Engineering: The Full Cycle of Systems Engineering, Herzliya, Israel, 14 September 2022 Oral presentation: <i>Remote lab for on line research: Conceptual design and prototype development</i> (M. Winokur)			
6/2021	Joint HIT-UBP Seminar: The Impact of Covid 19 on the Digital economy, Israel-Argentina, 23 June 2021 [online] Oral presentation: <i>The techno-economic paradigm of the digital era and the COVID-19 impact</i> (M. Winokur)			
3/2021	The 11th Israeli International Conference on Systems Engineering: Systems Engineering in the Age of Disruptions and Transformations, Israel, 16-17 March 2021 [online] Oral presentations: <i>Recent advances in system modelling and simulation</i> (M. Winokur, A. Zaguri) <i>Systems engineering track – M.Sc. in technology management</i> (M. Winokur, G. Albert)			
4/2019	21st International Conference on Industrial Engineering and Management, Airport City, Israel, 1 April 2019 Oral presentations: <i>Lab cluster for industrial engineering and technology management</i> (A. Benis, S. Amador Nelke, M. Winokur - presenter) <i>Introducing IOT concepts to industrial engineering students</i> (S. Amador Nelke, M. Winokur)			
3/2019	The 10th Annual Conference of AEAI for Intelligent Transportation Systems (ITS), Tel-Aviv, Israel, 12 March 2019 Oral presentation: <i>Systems engineering approach for managing transportation systems</i> (M. Winokur, G. Albert)			

5. Participation in Scholarly Conferences, contd.**e. Oral and Poster Presentations in Israel**

- 9/2011 International Conference on Systems Engineering (INCOSE-IL), Workshop, Herzliya, Israel
Oral presentation: *SPRINT R&D project presentation*
(M. Winokur)
- 11/2003 United Jewish Communities General Assembly, HIT, Holon, Israel, 18 November 2003
Oral presentation: *Importance of the bridge between academics and hi-tech industry: A case study*
- 11/1993 SQA Second Symposium, Tel-Aviv, Israel
Oral presentation: *Preparing a software process improvement program – Lessons learned*
(M. Winokur, J. Kudish, J.Z. Lavi) [in Hebrew]
- 5/1984 Energy 84 International Congress, Tel-Aviv, Israel
Oral presentation: *Voltage collapse prevention in isolated power systems*
(M. Winokur)

f. Oral and Poster Presentations Abroad

- 3/2021 Global Faculty Week 2021, Monterrey Technology University, Mexico, 1-4 March 2021
Oral presentation: *Technology and economy: The hidden bond*
(D. Blank, M. Winokur)
- 2/2021 ISC Paris International Week, 15-19 February 2021 [online]
Oral presentation: *Technology and economy: The hidden bond*
(D. Blank, M. Winokur)
- 7/2019 Joint UNSAM-HIT-UBP Workshop, National University of San Martin, Buenos Aires, Argentina, 22 July 2019
Oral presentation: *Using models for safe design of embedded systems*
(M. Winokur)
- 10/2018 Model-Based Design of Cyber Physical Systems (CyPhy'18) and Workshop on Embedded and Cyber-Physical Systems Education (WESE18), in conjunction with ESWEEK 2018, Torino, Italy, 4-5 October 2018
Oral presentation: *Introducing IoT subjects to an existing curriculum An ongoing experience*
(M. Winokur, S. Amador Nelke)
- 7/2005 USA-EU Workshop, Paris, France
Oral presentation: *Component-based engineering for embedded systems*
(M. Winokur)
- 5/2002 EC Consultation Day – Technologies and Engineering for SW, Systems and Services, Brussels, Belgium
Oral presentation: *Integrated development environment*
- 12/1992 IEEE International Workshop on Computer Based Systems Engineering, London, UK
Oral presentation: *Air traffic computer control system specification*
(Z. Lavi, M. Winokur, J. Kudish, R. Gallant)

6. Participation in Scholarly Conferences, contd.**f. Oral and Poster Presentations Abroad**

- 10/1992 First International I-Logix User Group Meeting, Boston, Mass., USA
 Oral presentation: *Use of ECSAM modeling in the state environment – The IAI experience*
 (M. Winokur)
- 6/1991 Software Development Environments and CASE Technology European Symposium, Königswinter, Germany, 17-19 June 1991
 Oral presentation: *Development of a method driven CAS²E tool*
 (J.Z. Lavi, M. Winokur)

g. Organization of Seminars Abroad

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
23/6/2021 [online]	Joint HIT-UBP Seminar: The Impact of Covid 19 on the Digital Economy	Israel/Argentina		Seminar Organizer

6. Invited Guest Lectures in Israel

Date	Place of Lecture	Name of Forum	Presentation/Comments
16/6/2015	IBM BusinessConnect 2015 – Seize the Moment, Tel-Aviv, Israel		Invited Speaker: IAI – A development home for systems of systems at the leading edge of world technology תעשייה אווירית: בית פיתוח מערכות על בהזית הטכנולוגיה העולמית
24-25/3/2015	INCOSE_IL 6th International Conference – Systems Engineering Current and Future Challenges, Herzliya, Israel		Invited Speaker: Cross tool/joint simulation in the DANSE project
17/7/2013	Gordon Center Systems Engineering Symposium, Technion, Haifa, Israel		Invited Speaker: Danse – Designing for Adaptability and evolution in System of systems Engineering
14/2/2013	Conference for Teaching Engineering Programs in Israel – New Horizons – From Employment to Career, Kinneret Academic College, Galilee, Israel		Invited Speaker: Continuity engineering between engineering systems to programs רציפות הנדסית בין הנדסת מערכת לתוכנה

6. Invited Guest Lectures Abroad

Date	Place of Lecture	Name of Forum	Presentation/Comments
17-19/7/2019	SASE 2019 – Argentine Symposium on Embedded Systems, National University of Rosario, Santa Fe, Argentina		Invited Speaker: Model based design of embedded systems – Theory and industrial reality
8/10/2015	2015 Workshop on Embedded and Cyber- Physical Systems Education (WESE), Amsterdam, Netherlands		Invited Keynote Speaker: Challenges of starting a new embedded systems specialty in an established EE dept.
18-19/3/2010	ARTEMIS Conference on Strategies for Embedded Computing Research, Vienna, Austria		Invited Speaker: Embedded systems: Critical technology for systems of systems
3/1997	The 8th SEPG USA National Meeting, San Jose, CA, USA		Invited Speaker: Approaches to corporate-level software engineering process group activities

7. Research Grants**a. Grants Awarded**

Year	Funded by/ Amount	Topic	Co-Researchers	Role in Research
2022-2024	The European Institute of Innovation and Technology (EIT) (possibility of extension for another 18 months)/ Overall budget: €1,200,000/ HIT's budget: €240,000	IDEATION – Innovation and Entrepreneurship Actions and Training for Higher Education in collaboration with Prof. Ariel Benis and Dr. Sophia Amador-Nelke	Five partners: • Wroclaw University of Science and Technology, Poland – project lead • University of La Laguna, Spain • Institute for Industrial Management (Germany) • Centre of Research and Technological Innovation, Italy • HIT – Holon Institute of Technology, Israel	P.I.
2011-2015	European Commission FP7 Project/13.5 M\$		Twelve partners - Leading academic researchers: • Prof. Roberto Passerone, Univ.Trento, Italy; • Prof. Roy Kalawsky- Loughborough Univ. UK	Technical Leader
2010-2014	European Commission FP7 Project/4 M\$	SPRINT: Software Platform for Integration of Engineering and Things, Application Manager	Seven partners	Application Manager

7. Research Grants, contd.**a. Grants Awarded**

Year	Funded by/ Amount	Topic	Co-Researchers	Role in Research
2010-2014	European Commission FP7 Project/4.7 M\$	AMISA – Architecting Manufacturing Industries and Systems for Adaptability Budget		
2010-2013	European Commission FP7 Project/4.5 M\$	PINCETTE: Validating changes and upgrades in networked software	Seven partners	
2006-2010	European Commission FP6 Project/19 M\$	SPEEDS: Speculative and Exploratory Design of Embedded Computer Systems	Sixteen partners Leading academic researchers: • Prof. Werner Damm, Univ. Oldenburg Germany • Prof. Alberto Sangiovanni-Vincentelli, UC Berkeley • Prof. Albert Benveniste, INRIA France • Prof. Joseph Sifakis, CNRS France	Technical Leader
1999-2004	European Commission FP5 Project/7.5 M\$	SAFEAIR Advanced Design Tools for Aircraft Systems and Airborne SW	Ten partners	Application Leader
1999-2002	Office of the Israel Chief Scientist, Ministry of Economy, Israel/400 K\$	SW Re-Use Magnet Project	Five partners	Application Leader
1997-1999	European Commission FP4 Project/250 K\$	TRUMP: Usability of Software Intensive Systems	Joint project: National Physical Laboratory UK and Israel Aerospace Industries	Principal Investigators: M. Winokur, N. Bevan
1995-1998	European Commission ESPRIT- PF4 Project	SACRES: Safety Critical Embedded Systems: From Requirements to Architecture	Ten partners	Personal Participation Invitation

8. Scholarships, Awards and Prizes

2022	Certificate of Gratitude for Session Chair, ICECCME 2022 – 2nd International Conference on Electrical, Computer, Communications and Mechatronics Engineering, Maldives, 16-18 November 2022
2017	Executive VP of Operations' Award for Excellence in Work Performance, Israel Aerospace Industries, Israel
2014	CEO's Award for Engineering and Development, Israel Aerospace Industries, Israel
2007	Certification of Recognition - Founding Member, INCOSE_IL, Israel

8. Scholarships, Awards and Prizes, contd.

1991	Distinguished Employee Award, Israel Aerospace Industries, Israel
1980-1982	Ph.D. Scholarship, Bnei Brith, London, UK
1979-1982	British Council Fellowship Ph.D. Grant, British Council Fellowship, UK
1976	B.Sc. Summa Cum Laude Award, Technion – Israel Institute of Technology, Haifa, Israel
1975, 1974	President's honors list, Technion – Israel Institute of Technology, Haifa, Israel

9. Teaching**a. Courses Taught in Recent Years at HIT – Holon Institute of Technology**

Year	Name of Course	Type of Course Lecture/Seminar/ Workshop/High Learn Course/ Introduction Course (Mandatory)	Degree	Number of Students
2014-2018	Specification and Development of Embedded Computer Systems ^①	Lecture	B.Sc	
2015-2018	Development Tools for Embedded Computer Systems ^①	Lecture	B.Sc	
2010-	Software Engineering for Systems Engineers ^①	Lecture	M.Sc.	
2018-	Engineering Design 1 ^②	Lecture	M.Sc.	
2018-	Systems Engineering for Technology Intensive Products ^②	Lecture (mandatory)	M.Sc.	

^① New course, developed and taught by Dr. Winokur^② Updated by Dr. Winokur**b. Courses Taught in Recent Years at Technion – Israel Institute of Technology**

Year	Name of Course	Type of Course Lecture/Seminar/ Workshop/High Learn Course/ Introduction Course (Mandatory)	Degree	Number of Students
2000-2018	Embedded Computer Systems Specification and Analysis ^①	M.Sc.		
1975-1977	Linear Differential Equations ^③	B.Sc.		
1976- 1979	Power Systems ^③	B.Sc.		
1976-1979	Power Systems Lab. ^③	B.Sc.		

^① New course, developed and taught by Dr. Winokur^③ Teaching Assistant

9. Teaching, contd.**b. Courses Taught in Recent Years at Technion – Israel Institute of Technology**

Year	Name of Course	Type of Course Lecture/Seminar/ Workshop/High Learn Course/ Introduction Course (Mandatory)	Degree	Number of Students
1976-1979	Control Systems 1 ^③	B.Sc.		
1976-1979	Control Systems Lab. ^③	B.Sc.		
1976-1979	Control Systems ^③	B.Sc.		

① New course, developed and taught by Dr. Winokur

③ Teaching Assistant

c. Courses Taught in Recent Years at Tel-Aviv University

Year	Name of Course	Type of Course Lecture/Seminar/ Workshop/High Learn Course/ Introduction Course (Mandatory)	Degree	Number of Students
1998-2006	Software Specification and Analysis for Embedded Systems ^④	M.Sc./B.Sc.		

④ Computer Science and Computer Engineering joint degree – New course developed and taught by Dr. Winokur

Supervision of Graduate Students**a. Graduate Students - Computer Science Dept., Tel-Aviv University with Prof. A. Yehudai**

Name of Student	Title of Topic	Degree	Date of Completion/ in Progress	Students' Achievements
Guy Helman	Software Methods and Modeling for Embedded Systems	M.Sc.	1998	

b. Graduate Students at HIT – Holon Institute of Technology

Name of Student	Title of Topic	Degree	Date of Completion/ in Progress	Students' Achievements
Amir Gamliel	Analysis of non- quality cost factors and their root causes in technological development and production projects	M.Sc.	2024	Summa Cum Laude

10. Miscellaneous**a. Membership in Professional Societies**

2000-present	Member, INCOSE, International Council on Systems Engineering – International
1986-present	Senior Member, IEEE and IEEE Computer Science Society - International

11. Professional Experience

2005-11/2017	Corporate Director - Engineering and Development ^❶ - Corporate Operations, Israel Aerospace Industries (IAI)
1996-11/2017	Coordinator of IAI's participation in the EC Framework research programs ^❷ - Corporate Operations and Corporate R&D, Israel Aerospace Industries (IAI)
1993-2005	Corporate Director, Embedded Computer Systems ^❸ - Corporate R&D, Israel Aerospace Industries (IAI)
1986-1993	Research Engineer ^❹ - Corporate R&D, Malat (unmanned air vehicles) and TAMAM (optronics and inertial systems) divisions, Israel Aerospace Industries (IAI)
1983-1986	Senior Engineer ^❺ - R&D Division, Israel Electric Corporation (IEC)
1976	Junior Engineer ^❻ - Medical Systems Division, Philips Eindhoven, Holland

❶ Responsible for development, acquisition and technology transfer of methods, and tools for systems development, project management and engineering throughout IAI, involving a workforce of over 4500 systems, hardware and software engineers, working in over 500 projects involving 900 MU\$ yearly R&D budget. Responsibilities included direct involvement in complex systems of systems in the areas of unmanned air vehicles, robotics, satellites, defense missile systems, radars, optronics, communications and executive jet development.

❷ In this period IAI has participated in over 90 projects with a total R&D budget of 1BEuro.

❸ Responsible for development, acquisition and technology transfer of methods, and tools for Systems and SW development. In 1993 - established and continuously supervised since then IAI's Software and Systems Process Improvement Program which has enabled the certification of all IAI's development divisions to the highest CMMI Level 5 and ISO9001 certification.

❹ Working in SW development and technology transfer of modern methods and in leading edge projects for local and foreign customers. Principal researcher and applications engineer for the Embedded Computer Systems Analysis method (see ECSAM publications list) developed under the supervision of Dr. J.Z. Lavi in cooperation with Prof. Amir Pnueli and Prof. David Harel of the Weizmann Institute.

❺ Working on dynamic analysis and control for the Israel National grid and Power generation plants.

❻ Development of electronic drives for X-ray rotary tables positioning.

Industrial Training Experience

2008-11/2017	Developer of course structure - MAHUT Training Division, Israel Aerospace Industries (IAI) ^❷
2002-11/2017	Program Developer and Supervisor - MAHUT Training Division, Israel Aerospace Industries (IAI) ^❸
1999-2001	Program Developer - MAHUT Training Division, Israel Aerospace Industries (IAI) ^❹
1985-1987	Lecturer - Power Plant Engineers Training Program, Israel Electric Corporation (IEC) ^❺

❷ Content integration and teaching of selected modules. Project Management - 260 hours internal industrial course.

❸ Teaching of modules on requirements engineering and development management. Systems Engineering Processes and Tools – 240 hours internal IAI industrial training

❹ Content integration, course supervision and teaching of selected modules. IAI internal industrial retraining program in Systems Engineering (900 hours) for B.Sc. graduates of engineering disciplines.

❺ Introduction to Control Systems (45 hours); Power Plant Control (45 hours)

PUBLICATIONS**A. Ph.D. Dissertation**

Emergency state control of interconnected power systems, 1982 in English, Electrical and Systems Engineering, Imperial College, University of London, England (supervisor: Prof. Brian Cory)

D. Articles in Refereed Journals**Published**

1. A. Benis, S. Amador Nelke, M. Winokur
Training the next industrial engineers and managers about industry 4.0: A case study about challenges and opportunities in the COVID-19 era
Sensors, 21(9), 2021 (2905)
Special Issue: Industry 4.0 and Smart Manufacturing
<https://doi.org/10.3390/s21092905>
[569 full text views since being published (21 April 2021)]
2. S. Amador Nelke, M. Winokur
Introducing IoT subjects to an existing curriculum
IEEE Design & Test, 37(6), 2020 (24-30)
Special Issue on Education for Cyber Physical Systems
3. M. Winokur, B.J. Cory
Identification of strong and weak areas for emergency state control
IEEE Trans. on Power Apparatus and Systems, PAS-103(6), 1984 (1486-1492)
4. M. Winokur, B.J. Cory
Identification of strong and weak areas for emergency state control
IEEE Power Engineering Review, PER-4(6), 1984 (62-63)
5. M. Winokur, L. Tepper
Extension of load follow capability of a PWR reactor by optimal control
IEEE Trans. on Nuclear Science, NS 31(2), 1984 (932-939)
6. M. Winokur, D. Blank, L. Tepper
A method of optimization of flux and xenon fluctuations in a nuclear reactor
IEEE Trans. on Nuclear Science, NS-26(1), 1979 (791-795)

D. Articles in Refereed Journals (non-ranked)**Published**

1. A. Shaked, M. Winokur
Harnessing FMI to improve bottom-up coordination in SoS design
The Voice of the Systems, No.16, 2015 (32-39)

E. Chapters in Scientific Books**Published**

1. S. Amador Nelke, M. Winokur
Introducing IoT subjects to an existing curriculum. An ongoing experience at the Faculty of the Technology Management – HIT
In: *Cyber Physical Systems. Model-Based Design*
R. Chamberlain, W. Taha, M. Törnngren (Eds.)

Lecture Notes in Computer Science book series, Vol.11615 (193-196)

Springer, Cham.

[8th Int'l. Workshop (CyPhy 2018), and 14th Int'l. Workshop (WESE 2018)

Turin, Italy, 4-5 October 2018 (revised selected papers)]

https://doi.org/10.1007/978-3-030-23703-5_10

2. J.Z. Lavi, M. Winokur
Development of a method driven CAS²E tool
in: *Proc. Software Development Environments and CASE Technology European Symp.*
Lecture Notes in Computer Science, 509, 1991 (44-52)
Königswinter, Germany, 17-19 June 1991
[ISBN: 978-3-540-54194-3]
3. J.Z. Lavi (Loeb), M. Winokur
Embedded computer systems requirements analysis & specification – An industrial course
in: *Software Engineering Education*
Lecture Notes in Computer Science, 327, 1988 (81-105)
SEI Conf. on Software Engineering Education
Fairfax, Virginia, USA, 28-29 April 1988
[ISBN: 978-0-387-34779-0]

F. Articles in Conference Proceedings

Published

1. M. Winokur, S. Tenne, K. Tanhilevich, N. Reginiano
Bright solar
17th MODPROD Workshop on Model-Based Cyber-Physical Product Development
Linköping University, Sweden, 7-8 February 2023
2. M. Winokur, A. Benis, M. Firger, Y. Mordechaievi
Modeling by curve fitting for digital twin
17th MODPROD Workshop on Model-Based Cyber-Physical Product Development
Linköping University, Sweden, 7-8 February 2023
3. A. Zaguri, M. Winokur
Evaluation of practical modeling tools and methods for cyber physical systems
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