

AHMET DENKER

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Faculty of Engineering and Natural Sciences
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Personal Information

Academic Title	Professor
Citizenship	TC (TR)
Date of Birth and Place	January 19, 1955, Ünye, Turkey
Marital Status	Married with one daughter



Educational Background

Ph.D.	Electrical-Electronics Engineering and Computer Science, Sussex University, England, 1981
M.Sc.	Systems and Control Engineering, Sussex University, England, 1978
B.Sc.	Electrical and Electronics Engineering, Bogazici University, Istanbul, Turkey, 1994

Academic Appointments

Professor	Istanbul Bilgi University, Dept. of Electrical-Electronics Eng. 2010- Present
Professor	Girne American University, Dept. of Electrical-Electronics Eng. 2007- 2010
Professor	Ankara University, Dept. of Electronics Eng. 1997- 2007
Professor	Boğaziçi University, Dept. of Electrical-Electronics Eng. 1992- 1997
Associate Professor	Boğaziçi University, Dept. of Electrical-Electronics Eng. 1986- 1992
Assistant Professor	Boğaziçi University, Dept. of Electrical-Electronics Eng. 1982- 1986
Post-Doctoral Research Fellow	Sussex University, School of Engineering and Applied Sciences, 1981- 1982

Visiting Academic Positions

Visiting Professor	Cambridge University, 2015 (summer), 2016 (summer).
Matsumae Fellow	Keio University, Dept. of Electrical-Electronics Electronics Eng. 1995- 1996.
Project Leader	TUBİTAK MAM, Robotics Division, 1993- 1995.
Visiting Associate Professor	Eastern Mediterranean University, Dept. of Electrical-Electronics Electronics, N. Cyprus, 1989- 1990
UNESCO Fellow	ECRI (Emergency Care Research Institute), Philadelphia, USA, 1985
Visiting Lecturer	Open University, Dept. of Electronics Eng., England,1984.

Industrial Experience

General Manager	Havelsan, 1996-2003 (on leave from Boğaziçi University, and later Ankara University).
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Research Interests

Robotics:	Industrial Robots, Mobile Autonomous Robots, Visual Servoing, Cooperative Control of Multiple Mobile Robots, Artificial Intelligence, Teleoperation.
Control:	Industrial Control, Intelligent Motion Control, Linear and Nonlinear Control Systems, Optimal Control.
Computer Vision:	Object Recognition, Object Detection and Tracking, Motion Estimation, Multi-camera Surveillance, 3D Reconstruction, Shape Modeling, Pose Estimation.
Computer Graphics:	Virtual and Augmented Reality applied to the 3D reconstruction and visualization of the ancient architectures and cultural heritage.
Engineering Economics	Application of economic principles in the analysis of engineering decisions. Economics, finance and cost engineering. Project management in case of high inflation.

Publications

Books and Book Sections

1. Minna, S., Fangi G., **Denker, A.** (2018), *Reviving Palmyra in Multiple Dimensions: Images, Ruins, and Cultural Memory*, Whittles Academic and Research Publications, UK, ISBN: 978-184995-296-5.
2. Denker, H., **Denker, A.** (2004), *Mühendislik Ekonomisi*, Ankara Üniversitesi Yayınları, ISBN: 975-482-625-0.
3. **Denker, A.**, Denker, H. (2004), *Yönetim Ekonomisi*, Ankara Üniversitesi Yayınları, ISBN: 975-482-634-X.
4. **Denker, A.**, Kaynak, O.(1994), “Application of VSC in Motion Control Systems”, *Variable Structure and Lyapunov Control*, (a. Zinober ed.) Springer-Verlag, London, pp., 365-383.

Times Cited		
Web of Science: 1	Scopus:	Google:

SCI/SSCI/AHCI Publications *

*(from Web of Science Core Collection)

1. **Denker, A.** (2017), “Rebuilding Palmyra Virtually: Recreation of Its Former Glory, *Virtual Archaeology Review*, Volume:8 Issue:17 pages 20-30. DOI: <https://doi.org/10.4995/var.2017.5963>
2. **Denker, A.** (2017),” 3D Visualization and Photo-Realistic Reconstruction of the Great Temple of Bel, *3D Virtual Reconstruction and Visualization of Complex Architectures* Book Series: International Archives of Photogrammetry Remote Sensing and Spatial Information Sciences, Volume: 42-2 Issue W3 pages 225-229.
3. **Denker, A.**, Oniz, H. (2015), “3D Modeling of the Archaic Amphoras of Ionia”, *Underwater 3D Recording and Modeling, International Archives of the Photogrammetry Remote Sensing and Spatial Information Sciences*, Edited by: Menna, F; Nocerino, E; Del Pizzo, S; et al. Photogrammetry Remote Sensing and Spatial Information Sciences, Volume: 45 Issue: W5 Pages: 85-92
4. **Denker, A.**, Dilek, A. U.; Sarioglu, B.; et al. (2015), “RoboSantral: An autonomous mobile guide robot”, *Proc. IEEE International Conference on Industrial Technology (ICIT)*, Seville, SPAIN, Pages: 459-463.

5. **Denker, A.**, Akincioglu, U. (2006), “Neural Adaptive Switching Control of Robotic Systems”, *Proceedings of World Academy of Science, Engineering and Technology*, Volume: 14 Pages: 314-317.
6. **Denker, A.**, Gurkan, H. (2005), “An Iterative Way to Acquire Information Technology for Defense and Aerospace”, *Proceedings of World Academy of Science, Engineering and Technology*, Volume: 9 Pages: 1-5.
7. **Denker, A.**, Adiguzel, T. (2005), “Visual Object Tracking and Interception in Industrial Settings”, *Proceedings of World Academy of Science, Engineering and Technology*, Volume: 9 Pages: 25-27.
8. **Denker, A.**, Ohnishi, K. (1996), “Robust tracking control of mechatronic arms”, *IEEE-ASME Transactions on Mechatronics*, Volume: 1, Pages: 181-188.

Times Cited		
Web of Science: 6	Scopus: 3	Google:

9. Sitti, M., Bozma, I., **Denker, A.**, (1995), “Visual tracking for moving multiple objects: An integration of vision and control”, *Proceedings of the IEEE International Symposium on Industrial Electronics*, Volumes: 1 an 2, Pages: 535-540.

Times Cited		
Web of Science: 1	Scopus: 1	Google:

10. **Denker, A.**, Atherton, D. P. (1994), “No-overshoot Control of Robotic Manipulators in the Presence of Obstacles”, *Journal of Robotic Systems*, Volume: 11 Issue: 7 Pages: 665-678.

Times Cited		
Web of Science: 4	Scopus: 6	Google:

11. Kaynak, O., Sabanovic, A., **Denker, A.** (1994), “Predictive Control of a direct-drive manipulator with end state-vector weighting”, *IEEE 20th International Conference on Industrial Electronics, Control and Instrumentation*, Volume: 1-3, 3 Book Series: IEEE Industrial Electronics Society, Issue: 7, Pages: 1655-1658.

12. **Denker, A.**, Sabanovic, A., Kaynak, O. (1994), “Vision-Controlled Robotic Tracking and Acquisition”, *IROS '94 - Intelligent Robots and Systems: Advanced Robotic Systems and The Real World*, Vols 1-3, 2000-2006.

Times Cited		
Web of Science: 1	Scopus: 3	Google:

- 13. Denker, A., et.al** (1994), “Sliding Modes in Motion Control Systems”, *Proc. IEEE Int. Workshop on Robots Control, Variable Structure and Lyapunov Techniques*, Benevento, Pages: 332-335.

Times Cited		
Web of Science:3	Scopus:	Google:

- 14. Kaynak, O., Denker, A** (1994), “Discrete-time Sliding Mode Control in the Presence of System Uncertainty”, *International Journal of Control* Volume: 67 Issue: 2, Pages: 655-678.

Times Cited		
Web of Science: 59	Scopus: 69	Google:

- 15. Denker, A., Kaynak, O.** (1993), “Robot Path Planning and Control in a Cluttered Workplace”, *Proceedings of the IECON 93 - International Conference on Industrial Electronics, Control, and Instrumentation, Vols 1-3: Vol 1: Plenary Session, Emerging Technologies and Factory Automation; Vol 2: Power Electronics; Vol 3: Robotics, Vision, and Sensors: and Signal Processing and Control*, Pages: 1482-1487.

- 16. Denker, A., Tükel, D. B., Kaynak, O.** (1993), “Predictive Control of a Manipulator in a Cluttered Environment”, *Robot Control 1991 (SYROCO 91)* ; Book Series: IFAC Symposia Series, Volume: 1992 Pages: 243-246.

Other Publications in Refereed Journals

- 1. Denker, A.,** (2015), “Digital Cultural Heritage: Applications of 3D Computer Graphics in Reconstructing the Lost Reality of the Temples of Ionia”, *Journal of Naval Science and Engineering*, Volume: 11, Number:3, ISSN: 1304-2025.
- 2. Gürkan, H., Denker, A.** (2007), “Assesing Extension of Meeting System Performance in Information Technology in Defense and Aerospace Project”, *Int. Journal of Information Technology*, Vol. 3, No. 4, ISSN 1305-239X,.
- 3. Denker, A. , Kaynak, O.** (1993), “Slimsoc: A Merger of Sliding Mode and Self-Organizing Controllers with Application to Industrial Robots”, *Electrotechnical Review*, Vol. 60(2-3), 100- 108, July 1993.
- 4. Denker, A.**(1986), “Modelling and Simulation of Flight Simulators”, *I.T.U. Journal*, Volume 39, Number 1, pp .109-124.

5. **Denker, A.** (1985), “ An Investigation Into The Properties of Dynamical Transmissions”₂, *Journal of B.U.*, s .42-57.

International Conference Publications

1. **Denker, A.**, (2016), “Virtual Palmyra: 3D Reconstruction of the Lost Reality of the Bride of Desert”₂, *Arqueológica 2.0, 8th International Congress on Archaeology, Computer Graphics, Cultural Heritage and Innovation*, Valencia, Spain.
2. **Denker, A., Öviz, H. C.**(2013), “Stone Anchors of the Eastern Mediterranean: 3D Reconstructions”₂, *Proc. XVIIth Int.Symposium on Mediterranean Archaeology, SOMA '2013*, Moscow.
3. **Denker, A., Öviz, H. C.**(2013), “The World’s Four Great Ionic Temples: 3D Reconstructions”₂, *Proc. XVIIth Int.Symposium on Mediterranean Archaeology, SOMA '2013*, Moscow.
4. **Denker, A. , Öviz, H.** (2011), “3D Reconstruction of a Nautical Legend: Archimedes and Defense of Syracuse”₂, *Proc. XIIIrd Int.Symposium on Mediterranean Archaeology*, BAR International Series, Archaeopress, Oxford, England, pp 15-17, ISBN 978 1 4073 0756 5.
5. **Denker, A. , Öviz, H.** (2009), “3D Reconstruction of Antique Anchors Using Computer Graphics”₂, *Proc. XIIth Int.Symposium on Mediterranean Archaeology*, BAR International Series, Archaeopress, Oxford, England, pp 1-4.
6. Sitti, M., Bozma, I., **Denker, A.**(1995), “Cultural Semiotic Templates”₂, *Proc. 1st Int.Symposium on Semiotics*, Kyrenia, TRNC, pp .21-22.
7. Sitti, M., Bozma, I., **Denker, A.**(1995), “Visual Tracking for Moving Multiple Objects, An Integration of Vision and Control”₂, *ISIE'95*, Athens
8. Sitti, M.,Eruğrul, M., **Denker, A.**(1995), “Coordination of Two Robots Using Visual Feedback”₂, *Proc. Int. Conference on Recent Advances in Mechatronics (ICRAM'95)*
9. Sabanovic, A., **Denker, A.**, et al (1994), “Sliding Modes in Motion Control Systems”₂, *Proc.IEEE Int. Workshop on Robots Control,Variable Structure and Lyapunov Techniques*, Benevento, pp 332-335.

10. **Denker, A.**, Kaynak, O.(1993), “Robot Path Planning in a Cluttered Workplace”, *Proc. 1st Int.Symposium on Semiotics, IECON’93*, Hawaii 1993.
11. **Denker, A.**, Kaynak, O.(1992), “A Microcomputer Based Laboratory for Instrumentation and Control”, *NATO ASI*, Amsterdam.
12. **Denker, A.**, Kaynak, O.(1992), “A Sliding Mode Self- Organizing Controller for Robotic Manipulators”, *Proc. IEEE Workshop on Variable Structure and Lyapunov Control of Uncertain Dynamical Systems, Sheffield*, pp. 119-122.
13. Yesiltepe, M., **Denker, A.**, Kaynak, O.(1992), “Fast Collision- Free Motion Planning for Robots by Using Direct Kinematic Solutions”, *IFAC Workshop on Automatic Control for Quality and Productivity (ACQP’92)*, Istanbul, pp. 655-662.
14. Ozen, F., **Denker, A.**, Kaynak, O.(1992), “VSS Control of a Four DOF Robot”, *IFAC Workshop on Automatic Control for Quality and Productivity (ACQP’92)*, Istanbul, pp. 671-678.
15. **Denker, A.**, Küpeli, T.(1992), “Robot Path Planning in a Cluttered Common Task Space”, *IFAC Workshop on Automatic Control for Quality and Productivity (ACQP’92)*, Istanbul, pp. 708-715.
16. **Denker, A.**, Tükel, D. B., Kaynak, O.(1992), “Variable Structure and Predictive Control of a Manipulator in an Arbitrary Workspace”, *IEEE Int.Symp. On Intelligent Control and Instrumentations (SICICI’92)*, Singapur.
17. Tükel, D. B., Kaynak, O., **Denker, A.** (1991), “Predictive Control of a Robotic Arm in a Cluttered Environment”, *IFAC Symp. On Robot Control (SYROCO’91)*, Vienna.
18. **Denker, A.**, Uyguroğlu, M., O.(1991), “Utilisation of Virtual Arms for Collision-Avoidance in Multi-Robot Systems”, *Proc. Of. IEEE Conf. on Advanced Robotics (ICAR’91)*, Piza.
19. **Denker, A.**, Uyguroğlu, M., O.(1990), “Collision Avoidance in Multi-Robot Systems Through Cluttered Environments”, *Proc. Of. IEEE Workshop on Intelligent Motion Control*, İstanbul, pp.509-513.
20. Tükel, D. B., Kaynak, O., **Denker, A.** (1990), “VSS Control of a Redundant Manipulator in a Cluttered Environment”, *Proc. of IEEE Workshop on Variable Structure Systems*, Sarajevo, pp. T5.7-T5.12.

21. **Denker, A.** (1986), ‘‘Formulation and Microprocessor Based Application of a Control Procedure for Dynamical Automation’’, *Proc.of. IFAC.Int. Symp On Microprocessor Applications in Process Control*, İstanbul, pp 305-311.
22. Kaynak, O., **Denker, A.**, Akçizmeci, K. (1985), ‘‘A Microprocessor Based PWM Inverter with Discrete Integer Ratio Adaptive Mode’’, *MECO’85, Int.Symp. on Measurement and Control*, İstanbul, pp.191-194.
23. Cerid, O., **Denker, A.** (1984), ‘‘A Microprocessor Controlled D.C.Traction Drive For Electric/ Hybrid Vehicles’’, *Proc. of. 3rd. IFAC Symp. on Control in Power Electronics*, Number 2, Permagon Press, Zurich.
24. Anscomb, C., Burrows, C., **Denker, A.**(1982), ‘‘An Evaluation of Benefits Obtained by Using a C.V.T. in a Heat Engine-Electric Hybrid Car’’, *Int.Conf. On Systems Engineering in Land Transport*, London.

Other Publications in Refereed Journals (in Turkish)

1. **Denker, A.**, Öniz, H., Arıkan, A. C. (2009), ‘‘Arkeolojide 3 Boyutlu Canlandırma: Arşimed ve Siraküza’nın Deniz Savunması’’, *Aktüel Arkeoloji*, sayı: 12, s. 94-97.
2. **Denker, A.** (1993), ‘‘Microbilgisayarların Yapısal Özellikleri’’, *Otomasyon*, Ağustos 1993, s. 114-124.
3. **Denker, A.**(1993), ‘‘Robot Görmesi’’, *Otomasyon*, Nisan 1993, s. 68-70.
4. **Denker, A.**(1993), ‘‘Robot Kollarının Mekaniği ve Kontrolü’’, *Otomasyon*, Mart, s. 55-57.
5. **Denker, A.**(1993), ‘‘Endüstriyel Robotlarda Denetim Sorunları’’, *Otomasyon*, Şubat, 1993, s. 38-39.
6. **Denker, A.** (1993), ‘‘ Otomasyon ve Robotlar’’, *Otomasyon*, Ocak, s. 40-42.
7. **Denker, A.**, Tanyolaç, N., Göbelek, D. (1989), ‘‘Klinik Mühendisliğinde Bilgisayar Destekli Bir Veri Bankası Uygulaması’’, *B.Ü. BME Bülteni*, Eylül.
8. **Denker, A.** (1986), ‘‘Sistem Analiz Yöntemlerinin Gözbebeği Hareketlerine Uygulanımı’’, *B.Ü. BME Bülteni*, Sayı 2, s .13-18.

Other Conference Publications (in Turkish)

1. **Denker, A.**, Karaduman, B. (2016), ‘‘Hava Kalitesini ve Kirliliğini Ölçen Bir Otonom Gezgin Robot: Ventus’’₂, *Otomatik Kontrol Ulusal Toplantısı, TOK'2016*, 29 Eylül - 1 Ekim, Eskişehir, s.153-158.
2. **Denker, A.**, Gencay, Y.(2015), ‘‘Düşük Maliyetli Bir Stewart Platformu Prototipi’’₂, *Otomatik Kontrol Ulusal Toplantısı, TOK'2015*, 10-12 Eylül, Denizli, s.747-751.
3. **Denker, A.**, Dilek, A.U., Sarıoğlu, B., Savaş, J., Gökdel, Y.D.(2014), ‘‘Rehberlik Yapan Bir Otonom Mobil Robot: RoboSantral’’₂, *Otomatik Kontrol Ulusal Toplantısı, TOK'2014*, 11-13 Eylül, Kocaeli, s.1005-1009.
4. **Denker, A.**, Öniz, H., Arıkan, A. C. (2009), ‘‘Antik Gemilerin Bilgisayarlı Grafik Yöntemleriyle 3 Boyutlu Rekonstruksiyonu’’₂, 13. *Sualtı Bilim ve Teknolojileri Toplantısı, SBT 2009 Bildiri Kitabı*, s. 38-42, Lefkoşa, KKTC.
5. **Denker, A.**, Öniz, H., Arıkan, A. C. (2008), ‘‘Doğu Akdeniz Sualtı Antik Batıklarının Bilgisayarlı Grafik Yöntemleriyle 3 Boyutlu Rekonstruksiyonu’’₂, 12. *Sualtı Bilim ve Teknolojileri Toplantısı, SBT 2008 Bildiri Kitabı*, İzmir.
6. **Denker, A.**, Ince, F., Kalyoncu, C. (2007), ‘‘Elverişsiz Ortamlardaki Gezgin Robotların 3 Boyutlu Grafik Simulasyonu’’₂, *Otomatik Kontrol Ulusal Toplantısı TOK' 07, Bildiri Kitabı*, s. 377-380 İstanbul.
7. **Denker, A.**, Akıncıoğlu, U.(2006), ‘‘Robotik Sistemlerin Yapay Sinir Ağları ile Anahtarlamalı Uyarlamalı Denetimi’’₂, *Otomatik Kontrol Ulusal Toplantısı TOK' 06, Bildiri Kitabı*, s. 340-345, Ankara.
8. Sitti,M., Bozma, I., **Denker, A.** (1995), ‘‘Görsel İzleme’’₂, 2. *Mekatronik Modelleme ve Tasarım Bildirileri*, Ankara.
9. **Denker, A.** (1993), ‘‘Robot Elince Hareketli Bir Nesnenin İzlenmesi ve Randevunun Gerçekleştirilmesi’’₂, 1. *Mekatronik Tasarım ve İmalat Çalıştayı Bildirileri*, Ankara.
10. **Denker, A.**, Göbelek, D. (1985), ‘‘Nükleer ve Klinik Mühendisliğinde Bir Kompüter Uygulanımı’’₂, 3. *Nükleer Tıp ve Biyolojik Bilimler Konf. Bildirileri*, Ankara.
11. **Denker, A.** (1982), ‘‘Endüstriyel Robotların Tasarım ve Kontrolü’’₂, 1. *Otomatik Kontrol Ulusal Toplantısı, TOK'82 Bildiri Kitabı*, İstanbul, s. 27-33.

Thesis Supervision

Phd

1. T. Adıgüzel (2007), Differential Geometric Approaches to Nonlinear Control Systems, Ankara University (Together with Murat Efe).
2. H. Gürkan (2006), Project Management of High-Tech Air Force Defense System Projects, Ankara University.

MSc

1. Y. Gencay(2018), The Modeling and Simulation of a Stewart Platform Using Labview Environment.
2. M.C. İşeri (2017), Design and Implementation of a Mobile Search and Rescue Robot, Istanbul Bilgi University
3. İ.Evcili (2004), Application of Game Theory in Engineering Projects, Ankara University.
4. A. B. Yalçın (2004), Failed IT Projects: Management Lessons and Remedies, Ankara University.
5. İ.B. Yılmaz (2004), Project Management and Risk Minimization in High-Tech Projects, Ankara University.
6. M.Sitti (1994), Visual Tracking: An Integration of Control and Vision, Boğaziçi University.
7. S.Deveci (1993), VSC Control of a Robot Arm In-Between Obstacles , Boğaziçi University.
8. İ.Birol (1992), Quasi-Linearization Scheme in Articulated Mechanisms, Boğaziçi University.
9. H.M.Gökçen (1992), Control of a Stewart Mechanism Using Direct Kinematic Solution, Boğaziçi University.

10. M. Yeşiltepe (1992), Fast Collision-Free Motion Planning for Robots by Using Solutions, Boğaziçi University.
11. T. Küpeli (1992), Robot Path Planning in a Cluttered Task Space, Boğaziçi University.
12. M. Uyguroğlu (1990), Collision Avoidance of Robotic Manipulators , Eastern Mediterranean University.
13. D. B. Tükel (1990), Variable Structure and Predictive Control of a Redundant Manipulator in a Cluttered Environment , Boğaziçi University.
14. F. Özen (1989), Variable Structure Control of a Manipulator with Four Degrees of Freedom, Boğaziçi University.
15. H. Tığalay (1987), Control of Satellite Tracking Antennas, Boğaziçi University.
16. İ. N. Alp (1986), Universal Measurement System Controller, Boğaziçi University.
17. D. Göbelek (1985) Inventory Control in Clinical Engineering, Boğaziçi University.
18. A. Özkaya (1985) Microprocessor Based Stepping Motor Control , Boğaziçi University.
19. K. Akçizmeci (1985), Microprocessor Based PWM Inverter , Boğaziçi University.
20. M. Akay (1984), Microprocessor Based DC Chopper Drive For Electric Traction, Boğaziçi University (together with O. Kaynak) .

Projects

1. Endüstriyel uygulamalara yönelik bir prototip robotun tasarımı, imalatı ve denetlenmesi, TUBITAK 1001, Project No: 39, Role: Co-manager (together with O. Kaynak), 1996-1997.
2. UK-Turkey HE&Industry Partnership programme, British Council-KP13, Role: Co-manager (Together with S. Ozveren from Abertay Dundee University), 2012-2014.
3. Cyber-resurrection of Temple of Artemis by 3D Visualization Techniques, BAP-Ist. Bilgi University + British Council + British Museum, Role: Manager, 2011-2014.

4. Görme Yetenekli Bir Endüstriyel Robot, TUBITAK-MAM, Role: Manager, 1996-1997.
5. A Scara Type Intelligent Robot, BAP-Boğaziçi University, Role: Co-manager (Together with Y. Istefanopulos), 1993-1995
6. A Knowledge Based Robotic System, British Council, Role: Co-manager (Together with D. Atherton from Sussex University), 1993-1996.

Robotics Contest Projects

1. LAUTUS: An Environmental Cleaning Robot, **3rd Prize Winner** in the 4th ed. **The Laureate Award for Excellence in Robotics Engineering**, Role: Supervisor, 2016-17. Finals were held in Brazil in May 2017.
2. SALVOR: A Search and Rescue Robot, Finalist in the 3rd ed. **The Laureate Award for Excellence in Robotics Engineering**, Role: Supervisor, Finals were held in Mexico City in May 2016.
3. VENTUS: A Robot for Measuring the Air Quality and Pollution, **2nd Price Winner**, 2nd ed. **The Laureate Award for Excellence in Robotics Engineering**, Role: Supervisor, Finals were held in Madrid in May 2015.
4. ROBOSANTRAL: A Guide Robot, Finalist in the 1st ed. **The Laureate Award for Excellence in Robotics Engineering**, Role: Supervisor. Finals were held in Madrid in May 2014.

Awards and Honors

1. **Matsumae Fellowship**: Matsumae International Foundation, Japan, 1995.
2. **Chartered Engineer**: Institute of Electical Engineers, U.K., 1994.

Teaching Portfolio (Last Five Years)

Undergraduate Courses

- EEEN 201 Electrical & Electronics Circuits-1, Istanbul Bilgi University (Fall 2012)
- EEEN 202 Electrical & Electronics Circuits-2, Istanbul Bilgi University (Spring 2012)
- EEEN 210 Computer Graphics-1, Istanbul Bilgi University (Fall 2012, 13, 14, 15, 16)
- EEEN 321 Signals & Systems, Istanbul Bilgi University (Fall 2013, 14)
- EEEN 352 System Dynamics and Control, Istanbul Bilgi University (Spring 2013, 04,05,06)
- EEEN 390 3D Computer Graphics, Istanbul Bilgi University (Fall 2013,14,15,16)
- EEEN 380 Animation & Gaming, Istanbul Bilgi University (Spring 2014,15,16)
- EEEN 471 Robotics, Istanbul Bilgi University (Fall 2013,14,15,16)
- EEEN 480 Machine Vision, Istanbul Bilgi University (Spring 2014,15,16)

Graduate Courses

- EEEN 573 Robotics, Istanbul Bilgi University (Fall 2015,16)
- EEEN 562 Machine Vision, Istanbul Bilgi University (Spring 2015,16)
- ITL/EEEN 528 Cybersecurity, Istanbul Bilgi University (Spring 13, 14, 15, 16)