

ÖZGEÇMİŞ

1. **Adı Soyadı : SEMİH BİLGEN**

2. **Doğum Tarihi : 24/2/1953**

3. **Ünvanı : PROF. DR.**

4. **Öğrenim Durumu :**

Derece	Alan	Üniversite	Yıl
Lisans	ELEKTRİK ELEKTRONİK MÜH	ODTÜ	1973
Y. Lisans	BİLGİSAYAR BİLİMLERİ	RENSELAER POLYTECHNIC INSTITUTE, TROY, NY, ABD	1976
Doktora	ELEKTRİK MÜH	UNIVERSITY OF MANITOBA, KANADA	1982

5. **Akademik Ünvanlar :**

Ünvan	Alan	Üniversite	Yıl
Yardımcı Doçent	ELEKTRİK ELEKTRONİK MÜH	ODTÜ	1984
Doçent	ELEKTRİK ELEKTRONİK MÜH	ODTÜ	1987
Profesör	ELEKTRİK ELEKTRONİK MÜH	ODTÜ	1995

6. **Yönetilen Yüksek Lisans ve Doktora Tezleri :**

6.1. **Yüksek Lisans Tezleri :**

On Information Systems and Software Engineering:

1. Şenler, A.D., Inventory System Programming for the Gendarmery Heavy Maintenance and Repair Factory, MBA, 1984.

2. İnkaya, D.Z., An Investigation of Monitoring, Coordination and Improvement of Computerization in Turkish Public Sector Organizations, MBA, 1984.

3. Varođlu, K., Assessment of Informatics Hardware Technology, MBA, 1985.
4. Dođanaksoy, N., A Patient Database System, MBA, 1985.
5. Tanyeri, Ő., Management Information System for Middle East Technical University Revolving Fund Administration, MBA, 1986.
6. Őzden, N., Speaker-Independent, Isolated Word Recognition System, MS in EEE, 1986.
7. Karapolat, A.M., An Implementation of HL7, Health Care Data Exchange Standard, MS in Information Systems, 1998.
8. Turgay, Z.Z., Proposal of Vendor Evaluation Framework for IS/IT Outsourcing, MS in Information Systems, 2001.
9. alkayıő, M., A Proposed Approach for IS Outsourcing in the Turkish Land Forces Command, MS in Information Systems, 2001.
10. Őzdamar, D.A., An Algorithm for Comparison of MPEG7 Descriptor Structures, MS in Information Systems, 2001.
11. Sungur, G., An Applied Study of Information System Effectiveness, MS in Information Systems, 2001.
12. Ercan, C., The Software Requirements Specifications and Software Design Descriptions of a Quality Information System for Turkish Military Academy , MS in Information Systems, 2001.
13. Yücel, O., Information System Security, MS in Information Systems, 2001.
14. Őzcan, F., An Approach for Defensive Information Warfare in the Turkish Land Forces Command, MS in Information Systems, 2002.
15. Bilir, N., A Proposed Model for Turkish Land Forces Command Software Intensive Systems Acquisition Process, MS in Information Systems, 2002.
16. Salihođlu, Y., Adoption and Utilization of Information Systems in an Emerging Turkish Industrial Town: A Case Study on Gaziantep, MS in Information Systems, 2003.
17. Kaya, Ő., An Evaluation of Electronic Signature Policy Formation in Turkey (A Comparative Approach), MS in Information Systems, 2003, co-supervised with Prof.Dr.Haluk Geray.
18. Eralp, Ő., Design and Implementation of a Software Development Process Measurement System, MS in EEE, 2004.

19. Yıldırım, M., An Information System Re-Structuring Study for the Financial Inspection Board, MS in Information Systems, 2004.
20. Vural, İ., Success Factors in Public Information Systems Outsourcing: A Case Study, MS in Information Systems, 2004.
21. Pınar, A., Management Tool Support for Software Acquisition and Information Systems Outsourcing Projects for Turkish Land Forces Command, MS in Information Systems, 2004.
22. Çakır, M., Information System Effectiveness Assessment Framework for the Turkish Army, MS in Information Systems, 2004.
23. Akkan, B., Comparison of Software Estimation Methods on a Case Study, MS in Information Systems, 2004.
24. İspir, M., Test Driven Development of Embedded Systems, MS in EEE, 2004.
25. Güvence, Ç.I., Information Systems Success and Expectations for Information Technology Investment: Case Study, MS in IS, 2005.
26. Karapınar, H.T., JDP: A Tool to Support Pair Programming in Distributed Environments, MS in IS, July 2005.
27. Kaya, D., Software Reliability Assessment, MS in EEE, 2005.
28. Yüçetürk, K., Software Subcontracting Success: A Case Study on the Relationship Between Project Success and Process Metrics, MS in IS, November 2005.
29. Seçkin, H., Software Process Improvement Based on Static Process Evaluation, MS in EEE, April 2006.
30. Usta, A.S., Tool Support for Distributed Agile Software Development, MS in EEE, April 2006.
31. Yamaç, P.I., Improvement Proposal for a Software Requirements Management Process, MS in IS, April 2006.
32. Aydınöz, B., The Effect of Design Patterns on Object-Oriented Metrics and Software Error-Proneness, MS in EEE, September 2006.
33. Dursun, M., Data Sharing and Access with a CORBA Data Distribution Service Implementation, MS in EEE, September 2006.
34. Sezer, B., Software Engineering Process Improvement, MS in EEE, April 2007.

35. Yarıkaş, S., Strategic and Financial Motivation and Information Systems Outsourcing Success, MS in IS, July 2007.
36. Ener, A., Measurement Based Software Process Improvement, MS in EEE, November 2007.
37. Konuralp, Z., Software Process Improvement in a Software Development Environment, MS in EEE, December 2007.
38. Elalmış, M.E., Software Process Improvement, MS in EEE, December 2007.
39. Ünlü, C., The Effects of Test-driven Development on Software Quality and Productivity, MS in EEE, September 2008.
40. Kaşıkçı, B.C.C., Variability Modeling in Software Product Lines, MS in EEE, September 2009.
41. Türk, T., The Effect of Software Design Patterns on Object-Oriented Software Quality and Maintainability, MS in EEE, September 2009.
42. Ayata, M., Effect of Software Design Patterns on Real Time Software Performance, MS in IS, June 2010.
43. B. Kekeç, Effects of Parallel Programming Design Patterns on the Performance of Multi-Core Processor Based Real Time Embedded Systems, MS in EEE, June 2010.
44. Gürses, Ö., Non-Functional Variability Management by Complementary Quality Modeling in a Software Product Line, MS in EEE, September 2010.
45. Sarıca, S., UML-Based Functional System Testing, MS in EEE, January 2011.
46. Deniz, B., Investigation of the Effects of Reuse on Software Quality in an Industrial Setting, MS in EEE, January 2013.
47. Çiftçi, A., Use of Design Patterns in Non-Object-Oriented Real-Time Software, MS in EEE, January 2013.
48. Çöteli, M.B., Testing Effectiveness and Effort in Software Product Lines, MS in EEE, January 2013.
49. Şenbayrak, Z., Effects of SPL Domain Engineering on Testing Cost and Maintainability, MS in EEE, January 2013.
50. Erturan, Y. N., A Method to Improve the Communication between Information Technology and healthcare Professionals During Mobile Healthcare Application Development Process, MS in IS, October 2013.
51. Ergül, M. E., An Action Research of Achievements in a Software Product Line Implementation, MS in EEE, January 2014.

52. Duran, M. B., Comparative Evaluation of Command Distribution via DDS and CORBA in a Software Reference Architecture, MS in EEE, April 2014.

53. Gölcük, H., Investigation of the Effects of Structural Characteristics of Object-Oriented Software on Fault-Proneess, MS in EEE, May 2014.

On Electrical and Electronics Engineering, Communications Networking or Mathematical Modeling:

1. Ekmekçioğlu, S., A Control Oriented 8-Bit Microcomputer, MS in EEE, 1987.

2. Anıl, E., Design and Implementation of a Microcontroller-Based Automatic Dispenser, MS in EEE, 1987.

3. Tanrıdağ, L.N., Universal EPROM Programmer Design, MS in EEE, 1987.

4. Ünsal, A., A New Encryption Algorithm With Signature for Communication Security, MS in EEE, 1988.

5. Ekinçi, O., Implementation of a Standard Virtual Terminal Protocol, MS in EEE, 1988.

6. Altıntaş, O., An Approximate Solution of the Resequencing Problem in Packet Switching Networks, MS in EEE, 1990.

7. Salamah, M., Structural Performance Analysis of the Generalized Hypercube Multiprocessor Network, MS in EEE, 1990.

8. Özdemir, T., Implementation of (63,43) Reed-Solomon Decoder using the Z-80 General Purpose Microprocessor, MS in EEE, 1990, co-supervised with Dr.M.D.Yücel.

9. Şut, E., Implementation of (63,43) Reed-Solomon Decoder with the 8749 Single-Chip Microcomputer, MS in EEE, 1990, co-supervised with Dr.M.D.Yücel.

10. Bağrıaçık, Y., Performance Evaluation of a Packet Switched Data Network Through Simulation, MS in EEE, 1990.

11. Akar, T., A Study on Large and Mesh Structured Circuit Switching Network Design, MS in EEE, 1990.

12. Yardım, Y., A Message Handling System Implementation: X-400 on Token Ring, MS in EEE, 1990.

13. Ün, M., Object-Oriented Software Design and Implementation of a Real-Time Telecommunications Controller, MS in EEE, 1991.

14. Özyıldırım, S., Conformance Testing of a Standard Virtual Terminal Protocol, MS in EEE, 1991.
15. Duman, S., A Multi-Transputer Based RS Decoder, MS in EEE, 1992, co-supervised with Dr.M.D.Yücel.
16. Başlar, B., A Simulation Package for ATM Switch Performance Evaluation, MS in EEE, 1992.
17. Özköse, Ö., Design of a Multi-Processing Kernel on EECB Bus, MS in EEE, 1993.
18. Gürdal, E., A Study on Improvement of the Performance of the Manhattan Street Network, MS in EEE, 1993.
19. Durmaz, N., Simulation Based Study of Multi-Server Multi-Class Priority Queueing, MS in EEE, 1993
20. Şentürk, M., Security in IP Networks and an Authentication Server System, MS in EEE, 1995.
21. Arslan, Y., Parallel DQDB Processor Implementation and Performance Evaluation, MS in EEE, 1996.
22. Batıkhah, H., An HF Gateway to Local Area Network Interface Design, MS in EEE 1997.
23. Tiryaki, R.M., Parallel Processing Applications of String Search Algorithms on a Transputer-Based Network, MS in EEE, 1997.
24. Fitoz, C., Multiprocessor Message Traffic Distribution Modeling, MS in EEE, 1997.
25. Gökışık, D., Wavelength Routing Algorithms for Optical Networks, MS in EEE, 1998.
26. Tunalılar, S., Performance of TCP over ATM, MS in EEE, 1998.
27. Ayaydın, N., Embedded Web Server Design for Management of Real Time Systems, MS in EEE, 1999.
28. Yıldız, K., A Modification for an Optimal Routing Algorithm for All-Optical Networks, MS in EEE, 1999.
29. Oğuzman, B., Effects of Optical Memory Management Schemes on WDM Packet Switch Performance, MS in EEE, 2000.
30. Savaşır, N., Simulation-Based Study of Effects of Topology on the Performance of Packet and All-Optical Networks, MS in EEE, 2000.
31. Yargıçoğlu, A.U., An Investigation of Wavelength Division Multiplexing Networks Under Internet Traffic, MS in EEE, 2000.
32. Mındıkoğlu, E., Wavelength Converter Placement in All-Optical Networks, MS in EEE, 2001.

33. Kahraman, G., An Investigation of WAP Transaction Protocol Performance for Packet Radio Networks, MS in EEE, 2002.
34. Demirci, T., A Performance Study on Real-Time IP Multicasting, MS in EEE, 2002.
35. Tanrıverdi, E., Simulation Based Investigation of An Improvement for Faster SIP Re-registration, MS in EEE, 2004.
36. Taşdelen, Y., Wireless Networks Performance Study, MS in EEE, 2004.
37. Çakmak, Y., Mobile Network Traffic Modeling, MS in EEE, 2004.
38. Çetinbaş, E.İ., Simulation Based Investigation of Mobile IP Improvements, MS in EEE, 2005.
39. Eroğlu, M., A New Stack Architecture for Sensor Networks, MS in EEE, September 2006.
40. Yazıcı, M.A., Performance Analysis of a Power Aware Routing Protocol for Ad Hoc Networks, MS in EEE, December 2006.
41. Yılmaz, M., Duty Cycle Control in Wireless Sensor Networks, MS in EEE, September 2007.
42. Türk, F., Improvements to Neural Network Based Restoration in Optical Networks, MS in EEE, May 2008.
43. Kaya, Z.E., Time Synchronization in Measurement Networks, MS in EEE, January 2010.
44. Türken, H., Performance Evaluation of a new Cross Layer Protocol for Sink Powered Underwater Acoustic Sensor Networks, MS in EEE, June 2013.
45. Acar, D., Performance Evaluation of an Underwater Acoustic Sensor Network Communication Protocol, MS in EEE, February 2014.

On music processing:

1. İzmirli, Ö., Computer Analysis of Musical Sound, MS in EEE, 1989.
2. Germen, E., Recognition and Transcription of One Part Melody with the Computer, MS in EEE, 1991.
3. Kezer, S., Computerized Real Time Musical Sound Recognition in a Noisy Environment, MS in EEE, 1996.
4. Gürsel, G.G., Alternative Transform Techniques for Musical Signal Processing, MS in EEE, 1998.

6.2. Doktora Tezleri :

On communications networking and mathematical modeling:

1. Memiřođlu, T., Adaptive Hybrid ARQ Schemes for Slowly Time-Varying Communication Channels, PhD in EEE, 1994.

2. Kuřdemir, L., A Parallel Architecture for DQDB Protocol Processing, PhD in EEE, 1994.

3. Salamah, M., An ATM Based Interconnection Architecture for Multicomputer Communication, PhD in EEE, 1996.

4. Germen, E., Statistical Self-Organizing Map, PhD in EEE, 1999.

5. Bařbuđođlu, O., Distributed Routing and Wavelength Assignment in WDM Networks, PhD in EEE, 2000.

6. Koçyiđit, A., Statistically Predictive Optimal Routing and Wavelength Assignment in All-Optical Networks, PhD in EEE, 2001.

7. Gökıřık, D., Distributed Restoration in Optical Networks Using Feed-Forward Neural Networks, PhD in EEE, 2003.

8. Demirci, T., Federated Simulation of Network Performance Using Packet Flow Modeling, PhD in EEE, 2010.

9. Bereketli, A., Remotely Powered Underwater Acoustic Sensor Networks, PhD in EEE, 2013.

On information systems:

1. Özkan, S., PB-ISAM: A Process Based Framework for Information Systems Effectiveness Assessment, PhD in IS, 2006.

2. Atalağ, K., Archetype Based Domain Modeling for Health Information Systems, PhD in IS, 2007.
3. Tanrıöver, Ö., An Inspection Approach for Conceptual Models of the Mission Space in a Domain Specific Notation, PhD in IS, 2008.
4. Tokdemir, G., An Assessment Model for Web-Based Information System Effectiveness, PhD in IS, 2009.
5. Yurga, T., A Metrics-Based Approach to the Testing Process and Testability of Object-Oriented Software Systems, co-advisor with A.Dogru, PhD in IS, 2009.
6. Karagül, Y., Factors That Affect the Duration of CMMI-Based Software Process Improvement Initiatives, PhD in IS, 2009.
7. Eryılmaz, U., A Verification Approach for Dynamics of Metamodel Based Conceptual Models of the Mission Space, PhD in IS, 2011.
8. Güçlü, A.N., Modeling and Assessment of the Effectiveness of Government Information Systems, PhD in EEE, 2011.
9. Chouseinoglou, U., Organizational Learning Assessment in Software Development Organizations, PhD in IS, 2012.
10. Uçar, E., A Qualitative Model of the Critical Success Factors for the Effectiveness of Information Systems Outsourcing, PhD in IS, 2012.
11. Kahraman, G., A Framework for Qualitative Assessment of Domain Specific Languages, PhD in EEE, 2013.
12. Yılmaz Taştekin, S., Use of Project Similarity for Software Development Time Estimation, PhD in IS, 2013.
13. Aşan, E., Agile and Collaborative Systems Engineering, PhD in IS, 2014.
14. Tüzün, E., A Decision Support Model for Adopting Software Product Line Engineering, PhD in IS, 2014. (METU Informatics Institute, Best Thesis of the Year Award.)

15. Yarıkaş, S., Cloud Computing Effectiveness Assessment, PhD in IS, 2014.

16. İren, D., Cost of Quality for Crowdsourcing Management, PhD in IS, 2014. (METU Informatics Institute, Best Thesis of the Year Award.)

17. Dursun, M., Data Abstraction Method for Model Checking of Real-Time Systems, PhD in EEE, 2015.

On music processing:

1. İzmirli, Ö., A Tonal Context Model for Musical Sound Processing. PhD in EEE, 1997.

2. Bora, U., Piyano Parçalarının Çalışılmasına Yardım Eden Bilgisayar Destekli Bir Sistem (A Computer Based System for Aid in Practice of Piano Pieces – in Turkish), PhD in Music Education, Gazi University, Ankara, 1999.

7. Yayınlar

7.1 Uluslararası hakemli dergilerde yayınlanan makaleler

On communications networking and mathematical models:

1. Deligönül, Z.Ş., Bilgen, S., "Solution of the Volterra Equation of Renewal Theory with Galerkin Technique, Using Cubic Splines", J. Statist. Comput. Simul., 20, 1984, 37-45.
2. Bilgen, S., Deligönül, Z.Ş., "A Note on the Choice of Numerical Integration Scheme in Solving the Renewal Equation", J. Statist. Comput. Simul., 20, 1984, 81-84.
3. Bilgen, S., Deligönül, Z.Ş., "Weibull Renewal Equation Solution", Computing, 39, 1987, 71-76.
4. Bilgen, S., Aykut, M., Ekinci, O., "A Forms Class Virtual Terminal Service Project", Computer Networks and ISDN Systems, 14, 1987, 305-309.
5. Bilgen, S., Altıntaş, O., "An Approximate Solution for the Resequencing Problem in Packet-Switching", IEEE Trans. Comm., 42:2/3/4, 1994, 229-232.
6. Salamah, M., Bilgen, S., "Distributed Memory Multiprocessor Communications", ELEKTRİK, Turkish Journal of Electrical Engineering and Computer Sciences, 4:1-2-3, 1996, 1-23.
7. Koçyiğit, A., Bilgen, S., "Statistically Predictive Optimal Routing and Wavelength Assignment

in All-Optical Networks", Optical Networks Magazine, 4:6, November/December 2003, 121-133.

8. Gökışık, D., Bilgen, S., "Neural Network Based Optical Network Restoration with Multiple Classes of Traffic", Lecture Notes in Computer Science, Volume 2869/2003, Computer and Information Sciences - ISCIS 2003, pp. 771-778.
9. Gökışık Karpat, D., Bilgen, S., "Distributed Restoration in Optical Networks using Feed-forward Neural Networks", Photonic Network Communications, 12:1, July 2006, pp. 53-64.
10. Bereketli, A., Bilgen, S., "Remotely Powered Underwater Acoustic Sensor Networks", IEEE Sensors, December 2012, pp 3467-3472.

On information systems:

1. Özkan, S., Hackney, R.A., Bilgen, S., "Process Based Information Systems Evaluation: Towards the attributes of 'PRISE'", Journal of Enterprise Information Management, 20: 6, 2007, pp. 700 – 725.
2. Atalag K, Bilgen S, Gur G, Boyacioglu S, "Evaluation of the Turkish translation of the Minimal Standard Terminology for Digestive Endoscopy by development of an endoscopic information system", Turkish Journal of Gastroenterology (SCIE), 18:3, 2007, pp. 157-164.
3. Özkan, S., Çakır, M, Bilgen, S. "A Maturity Based Qualitative Information Systems Effectiveness Evaluation of a Public Organization in Turkey", Journal of Cases on Information Technology (JCIT), 10: 3, July-September 2008, pp.58-71, ISSN: 1548-7717; EISSN: 1548-7725.
4. Güçlü, N., Bilgen, S., "Modelling and Assessment of the Effectiveness of Government Information Technologies - Value Space Approach with a Public Sector Case Study in Turkey", Electronic Journal of Information Systems in Developing Countries – EJISDC, (2011) 45, 4, pp. 1-30.
5. Tanrıöver, Ö.Ö., Bilgen, S., "A framework for reviewing domain specific conceptual models", Computer Standards & Interfaces, 33 (2011), pp. 448-464.
6. Chouseinoglou, O., İren, D., Karagöz, N. A., Bilgen, S., "AiOLoS: A model for assessing organizational learning in software development organizations", Information and Software Technology, Volume 55, Issue 11, November 2013, Pages 1904-1924, ISSN 0950-5849, <http://dx.doi.org/10.1016/j.infsof.2013.05.004>.
7. Yarlikas, S., Bilgen, S. "Cloud Computing Effectiveness Assessment", International Journal of Cloud Computing and Services Science (IJ-CLOSER) (2013), Vol.2, No.4, pp. 226-248.
8. Kahraman, G., Bilgen, S., "A framework for qualitative assessment of domain-specific languages", Software and Systems Modeling (2013), [DOI 10.1007/s10270-013-0387-8]
9. Uçar, E., Bilgen, S., "A Case-based Model for Assessing the Effectiveness of Information Systems Outsourcing", Journal of Information Technology Case and Application research (JITCAR), 15 (3), 2013.

10. [Chouseinoglou, O., Bilgen, S., "Introducing critical thinking to software engineering education", *Software Engineering Research, Management and Applications*, \(2014\) pp. 183-195. \[DOI: 10.1007/978-3-319-00948-3_12\]](#)
11. [Yarlıkaş, S., Bilgen, S., "Measures for Cloud Computing Effectiveness Assessment", *International Journal of Cloud Applications and Computing \(IJCAC\)*, 4:3, 2014, pp. 20-43.](#)
12. Tüzün, E., Tekinerdoğan, B., Kalender, M. E., Bilgen, S., "Empirical evaluation of a decision support model for adopting software product line engineering", [Information and Software Technology](#), Vol. 60, April 2015, pp. 77–101. [doi:10.1016/j.infsof.2014.12.007](#)
13. Tastekin, S.Y., Erten, Y.M., Bilgen, S., "Accounting for Product Similarity in Software Project Duration Estimation", [International Journal of Software Engineering and Knowledge Engineering \(IJSEKE\)](#), 26:1, 2016, 63-86.

On music processing:

1. İzmirli, Ö., Bilgen, S., "A Model for Tonal Context Time Course Calculation from Accoustical Input", [Journal of New Music Research](#), 25:3, 1996, 276-288.
2. Bora, U., Tufan, S., Bilgen, S., "A Tool for Comparison of Piano Performances", [Journal of New Music Research](#), , 29:1, 2000, 85-99.

7.2. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (proceedings) basılan bildiriler

On communications networking and mathematical modeling:

1. Bilgen, S., Wexler, A., "Spline Boundary Element Solution of Dielectric Scattering Problems", [12. European Microwave Conference, Helsinki, 1982, 372-377.](#)
2. Bilgen, S., "International Standards in Computer Networks and the Turkish Research Community", [OECD Seminar on Information Technology and Development](#), Istanbul, 1986.
3. Ekinci, O., Bilgen, S., "Implementation of ISO Virtual Terminal Protocol over MS-DOS", [ISCISIII: Third International Symposium on Computer and Information Sciences](#), Izmir, 1988, 12-18.
4. Bilgen, S., "Rural Voice Communications in Turkey", [OECD Seminar on the Regional Impact of Advanced Telecommunications Services](#), Sweden, 1990.
5. Altıntaş, O., Bilgen, S., "An Approximate Solution of the Resequencing Problem in Packet Switching Networks", [NATO Advanced Research Workshop on Architecture and Performance Issues of High Capacity Local and Metropolitan Area Networks](#), France, 1990.
6. Salamah, M., Bilgen, S., "Structural Performance Analysis of the Generalized Hypercube", [ISCISV: Fifth International Symposium on Computer and Information Sciences](#), Cappadocia, 1990.
7. Şut, E., Özdemir, T., Yücel, M.D., Bilgen, S., "Comparison of Reed-Solomon Decoder Implementations Based on Two Different Microprocessors", [IEEE MELECON'91](#), Ljubljana,

1991, 614-617.

8. Altıntaş, O., Bilgen, S., "An Approximate Solution of the Heterogeneous Multi-Server Queuing Problem", IEEE MELECON'91, Ljubljana, 1991, 961-964.
9. Kuşdemir, L., Bilgen, S., "A Highly Parallelized Architecture for a DQDB Node", International Conference on Network Protocols, ICNP'93, San Francisco, 1993, 27-34.
10. Memişoğlu, T., Bilgen, S., "An Adaptive Hybrid ARQ Scheme Based on Exponentially Weighted Moving Averages for Slowly Time-Varying Communication Channels", IEEE International Symposium on Information Theory, Trondheim, 1994.
11. Memişoğlu, T., Bilgen, S., "An Adaptive Hybrid ARQ Scheme for Slowly Time-Varying Communication Channels", IEEE MELECON'94, Antalya, 1994.
12. Salamah, M., Bilgen, S., "An ATM Based Multiprocessor Communication Architecture", ISCIS X, International Symposium on Computer and Information Sciences, Kuşadası, 1995, 785-792.
13. Bilgen, S., Salamah, M., "Performance of the Double-LIB Architecture", IEEE MELECON'96, Bari, Italy, 1996.
14. Germen, E., Bilgen, S., "A Statistical Approach to Determine the Nighbourhood Function and Learning Rate in Self-Organizing Maps", Progress in Connectionist-Based Information Systems, Proceedings of the 1997 International Conference on Information Processing and Intelligent Information Systems, ICONIP'97, Vol.1, 334-337, Springer, 1997.
15. Germen, E., Bilgen, S., "StatSOM - Statistical Self Organizing Map", International Conference on NeuroComputing, NC'98, Vienna, 1998.
16. Başbuğoğlu, O., Bilgen, S., "A Distributed Minimal Congestion Routing Algorithm for WDM Networks", ISCIS XIV, International Symposium on Computer and Information Sciences, Kuşadası, 1999, 685-692.
17. Germen, E., Bilgen, S., "StatSOM: A Statistical Approach to Determine the Parameters of Kohonen's SOM", ISCIS XIV, International Symposium on Computer and Information Sciences, Kusadası, 1999, 763-770.
18. Koçyiğit, A., Bilgen, S., "Statistically Predictive Optical Wavelength Routing", ISCIS XV, International Symposium on Computer and Information Sciences, İstanbul, 2000, 358-365.
19. Demirci, T., Bilgen, S., "A Performance Study on Real-Time IP Multicasting", ISCC'03, Eighth IEEE International Symposium on Communications and Computers, Antalya, 2003.
20. Kahraman, G., Bilgen, S., "Wireless Application Protocol Transport Layer Performance", ISCC'03, Eighth IEEE International Symposium on Communications and Computers, Antalya, 2003. (Paper awarded "*Honourable Mention in Simulation*")
21. Gökışık, D., Bilgen, S., "Distributed Restoration In Optical Networks Using Feed-Forward Neural Networks", ISCIS XVIII, International Symposium on Computer and Information Sciences, Antalya, 2003.
22. T. Demirci, A. Kalaycioglu, O. Salor, S. Pakhuylu, M. Dagli, T. Kara, S. Bilgen, U. Sezen, I. Cadirci and M. Ermis, "National PQ Monitoring Network for Turkish Electricity Transmission System", 2007 IEEE Instrumentation and Measurement Technology Conference.

23. Bereketli, A., Türken, H., Bilgen, S., “Cross Layer Power Adaptive CSMA/CA for Sink Powered Underwater Acoustic Sensor Networks,” in Proc. 12th Annual Mediterranean Ad Hoc Networking Workshop (Med-Hoc-Net), pp. 26-33, Ajaccio, Corsica, France, June 2013.

On information systems:

1. Bilgen, S., “Internet-Based Graduate Training: An Experience with Group Projects”, SIMPLAC’2002, Latin American and Caribbean Symposium on Education, Science and Culture in the Information Society, Havana, 2002.
2. Özkan, S., Bilgen, S., "Notes Towards IS Assessment: A Comparison of two Models within the Context of the Internet", Proc. Int. Assoc. Development of Information Society (IADIS) International Conference WWW/Internet 2003, Algarve, Portugal, Vol.2, pp.1215-1219.
3. Özkan, S., Bilgen, S., "Merging of IT Process Quality Frameworks With Other Business Process Measurement Frameworks", Proc. 12th European Conference on Information Technology Evaluation, 2005, pp.366-376.
4. Atalağ, K., Bilgen, S., “Multi-Level Modeling and the Role of Archetypes in the Design of Health Information Systems: A Modeling Example in Endoscopy”, HIBIT’07 International Symposium on Health Informatics and Bioinformatics, Antalya, Turkey, May 2007.
5. Tanrıöver, Ö., Bilgen, S., “An Inspection Approach for Conceptual Models for the Mission Space Developed in Domain Specific Notations of UML”, SIW’07 Fall Software Interoperability Workshop, Orlando, Florida, September 2007.
(http://www.sisostds.org/conference/download.cfm?Phase_ID=2&FileName=07F-SIW-031.pdf)
6. Tanrıöver, Ö., Bilgen, S., “An Inspection Approach for Conceptual Models in Notations Derived from UML: A Case Study”, ISCIS’07, International Symposium on Computer and Information Sciences, Ankara, November 2007.
7. Kaşıkçı, B.C.C., Bilgen, S., “Scalable Modeling of Software Product Line Variability”, SPLC’09, International Software Product Line Conference, San Francisco, August 2009, pp. 134-141.
8. Güçlü, N., Bilgen, S., “Process Based Public Value and Effectiveness of Government Information Systems”, RCIS2010, Proceedings of Research Challenges in Information Systems, Nice, France, 2010, pp.429-436.
9. Güçlü, N., Bilgen, S., “Modeling and Assessment of the Effectiveness of Government Information Systems”, IAMOT 2010, Proceedings of 19th International Conference on Management of Technology, Cairo, Egypt, 2010.
10. Uçar, E., Bilgen, S., “Effectiveness of Information Systems Outsourcing: An Exploratory Case Study”, IADIS-IS2012, IADIS International Conference on Information Systems, Berlin, 2012, pp. 383-387.
11. Yarlikas, S., Bilgen, S., “Economic and Technical Assessment of Cloud Computing”, CLOSER2012, Proceedings of the 2nd International Conference on Cloud Computing and Services Science, Lisbon, 2012, 167-172.
12. Chouseinoglou, O., Bilgen, S., “A Model for Assessing Organizational Learning in Software Development Organizations”, HCSE 2012, Toulouse, France, October 2012, LNCS 7623, 251-258.

13. Yılmaz Taştekin, S., Erten, Y. M., Bilgen, S., "Product Development Time Improvement with Requirements Reuse", The Seventh International Conference on Software Engineering Advances, ICSEA 2012, November 18-23, 2012 - Lisbon, Portuga, pp. 394-400.
14. Özen, G., Karagöz, N. A., Chouseinoglou, O., Bilgen, S., "Assessing Organizational Learning in IT Organizations: An experience report from industry", 23rd International Workshop on Software Measurement (IWSM) and the 8th International Conference on Software Process and Product Measurement (Mensura) (IWSM-MENSURA 2013), Ankara, 23-25 October 2013.
15. [Chouseinoglou, O., Bilgen, S., "Introducing Critical Thinking to Software Engineering Education", Software Engineering Research, Management and Applications, Studies in Computational Intelligence Volume 496, 2014, pp 183-195.](#)
16. [Tüzün, E., Tekinerdogan, B., Bilgen, S., "Deriving Metrics to Support Software Product Line Feasibility Analysis", ICSR Workshop, DReMeR'13.](#)
17. [Erturan, Y.N., Bilgen, S., Tokdemir, G., Cagiltay, N.E., Ozcebe, E., "A Mobile Application Flow Representation for Mutual Understanding of IT and Healthcare Professionals", M. Kurosu \(Ed.\): Human-Computer Interaction, Part I, HCII 2013, LNCS 8004, pp. 310–319, 2013.](#)
18. [Asan, E., Albrecht, O., Bilgen, S., "Handling Complexity in System of Systems Projects – Lessons Learned from MBSE Efforts in Border Security Projects", Proc. Fourth Int. Conf. Complex Systems Design & Management, CSD&M 2013, pp. 281-299.\(Best Paper Award\)](#)
19. Deniz, B., Bilgen, S., "An Empirical Study of Software Reuse and Quality in an Industrial Setting", B. Murgante et al. (Eds.): ICCSA 2014, Part V, LNCS 8583, pp. 508-523, 2014.
20. [Yildiz, E., Bilgen, S., Tokdemir, G., Çağiltay, N.E., Erturan, Y.N., "Analysis of B2C Mobile Application Characteristics and Quality Factors Based on ISO 25010 Quality Model", MWIS2014, LNCS 8640, pp 261-274, 2014.](#)
21. [Iren, D., Kul, G., Bilgen, S., "Utilization of synergetic human-machine clouds: a big data cleaning case", Proc. 1st International Workshop on CrowdSourcing in Software Engineering CSI-SE 2014, pp. 15-18.](#)
22. [Iren, D., Bilgen, S., "Cost models of quality assurance in crowdsourcing", IEEE Fifth Int'l Conf. On Communications and Electronics \(ICCE\), 2014, pp. 504-509.](#)

On music processing:

1. Germen, E., Bilgen, S., Yücel, M.D., "A Microprocessor-Based System for Transcription and Processing of Single-Part Music", 10th International Conference on Artificial Intelligence, Workshop W12, Vienna, 1992.
2. İzmirli, Ö., Bilgen, S., "Classification of Note-Rhythm Complexities in Melodies Using a Neural Network Model", 10th International Conference on Artificial Intelligence, Workshop W12, Vienna, 1992.
3. İzmirli, Ö., Bilgen, S., "Recognition of Musical Tonality with Finite State Automata", International Symposium on Computer and Information Sciences, ISCIS VIII, Istanbul, 1993.
4. İzmirli, Ö., Bilgen, S., "Single and Multi-part Tonal Context Determination", International

Conference on Music Perception and Recognition ICMPC III, Liege, 1994.

5. İzmirli, Ö., Bilgen, S., "Recognition of Musical Tonality from Sound Input", IEEE MELECON'94, Antalya, 1994.
6. İzmirli, Ö., Bilgen, S., "A Multiple Frequency Tracking Algorithm", JIM'96, Computer Music Conference, Caen, France, 1996.
7. Bora, U., Bilgen, S., "Computational Comparison of Piano Performances", ISCIS XIV, International Symposium on Computer and Information Sciences, Kuşadası, 1999, 168-176.

7.3. Yazılan uluslararası kitaplar veya kitaplarda bölümler

1. İzmirli, O. and Bilgen, S. "Multiple Fundamental Tracking for Polyphonic Note Recognition" pp. 305-314 in M Chemillier and F. Pachet (Ed.s), Recherches et Applications en Informatique Musical, Hermes Editors, 1998.
2. Tanrıöver, Ö., Bilgen, S., "Ch. 15. UML-Based Conceptual Models and V&V," in S. Robinson, R. Brooks, K. Kotiadis, D.-J. Van Der Zee (Ed.s), Conceptual Modeling for Discrete-Event Simulation, Taylor & Francis, 2010.
3. Asan, E., Bilgen, S., "Ch. 4. Agility Problems in Traditional Systems Engineering - A Case Study" pp. 53-71, Complex Systems Design & Management, Springer, Berlin, Heidelberg, 2013. doi:10.1007/978-3-642-34404-6_4.
4. Asan, E., Albrecht, O., Bilgen, S., "Handling Complexity in System of Systems Projects – Lessons Learned from MBSE Efforts in Border Security Projects" pp. 281-299, Complex Systems Design & Management, Springer International Publishing, 2014. doi: 10.1007/978-3-319-02812-5_21.
5. Güçlü, A. N., Bilgen, S., Medeni, T. D., Alır, G., & Medeni, İ. T., "Management of Strategic Knowledge and Technology in Government Agencies for Public Value" pp. 4629-4640 in M. Khosrow-Pour (Ed.), Encyclopedia of Information Science and Technology, Third Edition, Hershey, PA: Information Science Reference, 2015. doi:10.4018/978-1-4666-5888-2.ch454
6. Yarlikas, S., & Bilgen, S., "Ch. 12. Measures for Cloud Computing Effectiveness Assessment" pp. 251-271 in Information Resources Management Association (Ed.), Web-Based Services: Concepts, Methodologies, Tools, and Applications, Hershey, PA: Information Science Reference, 2016. doi:10.4018/978-1-4666-9466-8.ch012.

7.4. Ulusal hakemli dergilerde yayınlanan makaleler

1. Bilgen, S., "Gelişmekte Olan Ülkeler ve Bilişim Uygulayım Bilimi", ODTÜ Gelişme Dergisi, 9:1, 1982, 87-97.
2. Bilgen, S., Deligönül, Z.Ş., "Yenileme Kuramında Volterra Denkleminin Çözümü İçin Bir Yöntem", ODTÜ Gelişme Dergisi, 11(3,4), 1984, 369-390.
3. [Salamah, M., Bilgen, S., "Distributed Memory Multiprocessor Communications", ELEKTRİK, Turkish Journal of Electrical Engineering & Computer Sciences, 4\(1-2-3\), 1996, 1-24.](#)
4. [Koçyiğit, A., Gökışık, D., Bilgen, S., "All-Optical Networks", ELEKTRİK, Turkish Journal of Electrical Engineering & Computer Sciences, 9\(2\), 2001, 69-121.](#)

5. Bilgen, S., Demirörs, O., Karagöz, A., "Kavramsal Modelleme ve Simülasyon Projelerinde Önemi", Savunma Sanayii Gündemi Dergisi, 2010/1, Sayı:11, 32-37.
6. [Yarlıkaş, S., Bilgen, S., "Bulut Bilişim sorunlarının önem düzeyleri üzerine bir inceleme", İnternet Uygulamaları ve Yönetimi Dergisi \(IUYD\), 2015, 6\(1\), 33-51.](#)

7.5. Ulusal bilimsel toplantılarda sunulan ve bildiri kitabında basılan bildiriler

1. Bilgen, S., "Doğal Dildeki Metinlerin Kavramsal Çözümlemesi", TBD 2. Ulusal Bilisim Kurultayı, Ankara, 1978, 175-183.
2. Bilgen, S., "Kişisel Bilgisayar Çevresinde Yönetim Bilişim Sistemi Geliştirme Teknolojisi", 2. Türkiye Bilgisayar Kongresi, Ankara, 1985, 11-15.
3. Bilgen, S., Deligönül, Z.Ş., "Kobra İşlevleri ve Tümlensel Denklemlerin Sayısal Çözümü", TBD 6. Ulusal Bilişim Kurultayı, Ankara, 1986, 84-91.
4. Bilgen, S., Ekinci, O., "Form Sınıfı Sanal Uç Hizmeti", II. Ulusal Elektrik Mühendisliği Kongresi, Ankara, 1987, 420-423.
5. Bilgen, S., Ekinci, O., "Bilgisayar Ağlarında Sanal Uç Protokolleri Kullanımı ve ISO 9040 Uygulaması", TBD 7. Ulusal Bilişim Kurultayı, Eskişehir, 1988, 215-222.
6. İzmirli, Ö., Bilgen, S., Yücel, M.D., "Bilgisayarda Müzik Tanıma", III Ulusal Elektrik Mühendisliği Kongresi, İstanbul, 1989, 440-442.
7. Akar, T., Bilgen, S., "Devre Anahtarlamalı Şebeke Tasarımı", III Ulusal Elektrik Mühendisliği Kongresi, İstanbul, 1989, 571-574.
8. Altıntaş, O., Bilgen, S., "Paket Anahtarlamalı Şebekelerde Başarım Çözümlemesi için bir Yaklaşık Yöntemi", III Ulusal Elektrik Mühendisliği Kongresi, İstanbul, 1989, 575-578.
9. Bilgen, S., "Bilişim Etkinliklerinde Kurumlaşma", 1989 Sanayi Kongresi, Ankara, 66-68.
10. İzmirli, Ö., Bilgen, S., Yücel, M.D., "Müzik Akorlarının Bilgisayarla Tanınması", ODTU EEMB 30.Yıl Sempozyumu, Ankara, 1989, 67-70.
11. Bilgen, S., "Bilgisayar Ağlarında Açık Sistem Bağlaşımı (OSI)", ODTU EEMB 30.Yıl Sempozyumu, Ankara, 1989, 236-238.
12. Altıntaş, O., Bilgen, S., "Bilgisayar Ağlarında Paket Ayırıştırma/Sıralama", ODTU EEMB 30.Yıl Sempozyumu, Ankara, 1989, 239-242.
13. Yardım, Y., Bilgen, S., "Bir Mesaj Aktarım Yazılımı", ODTU EEMB 30.Yıl Sempozyumu, Ankara, 1989, 254-257.
14. Bağrıaçık, Y., Bilgen, S., "TURPAK Paket Anahtarlama Şebekesinin Başarım Değerlendirmesi", TBD 8. Ulusal Bilişim Kurultayı, Ankara, 1990.
15. Kuşdemir, L., Bilgen, S., "Yüksek Hızlı Bilgisayar Ağları - Fiber Dağıtık Veri Arabirimi (FDDI) ve Dağıtık Kuyruk İkili Anahat (DQDB) Standartları", BILKON'91, Ankara, 1991, 170-173.
16. Bilgen, S., Başlar, B., "ATM Bağlayıcısı Başarım Değerlendirmesi İçin bir Benzetim Modeli",

IV. Ulusal Elektrik Mühendisliği Kongresi, İzmir, 1991.

17. Memişoğlu, A.T., Bilgen, S., "Gilbert-Elliott Kanalı İçin bir Karma ARQ Protokolü", IV. Ulusal Elektrik Mühendisliği Kongresi, İzmir, 1991.

18. Bilgen, S., "Bilişim ve Müzik", TBD BİLİŞİM'93, İstanbul, 1993, 54-57.

19. Bilgen, S., Salamah, M., "Çokişlemcili Bilgisayarlarda İşlemcilerarası İletişim için bir ATM Bağlayıcı Önerisi", BAS'96 1. Bilgisayar Ağları Sempozyumu, İstanbul, 1996, 173-179.

20. Bilir, B., Bilgen, S., "Packet Radio TDMA Performance Evaluation", BAS'97 2. Bilgisayar Ağları Sempozyumu, Ankara, 1997, 109-116.

21. Başbuğoğlu, O., Bilgen, S., "A Distributed Minimal Wavelength Conversion Routing Algorithm for WDM Networks", BAS'99 4. Bilgisayar Ağları Sempozyumu, İstanbul, 1999, 36-43.

22. Bilgen, S., "Kamu Kesiminde Bilişim Hizmetlerinde Dış Kaynak Kullanımı", Davetli Konuşma, TBD BİLİŞİM'99, (Outsourcing of Information Systems Services in the Public Sector, Invited Speech, in Turkish) İstanbul, 1999, 67-70.

23. Koçyiğit, A., Bilgen, S., "Tümüyle Optik Ağlarda İstatistiksel Öngörüye Dayalı Eniyi Yönlendirme ve Dalga Boyu Atama", BİLİŞİM'2001, Eylül 2001, İstanbul.

24. Eryılmaz, U., Bilgen, S., Molyer, O., "Doğrulama ve Geçerleme Yaklaşımlarının Görev Uzaı Kavramsal Modellerine Yönelik İncelenmesi", SAVTEK 2006, Haziran 2006, Ankara.

25. Chouseinoglou, O., Karagöz, N.A., İren, D., Özen, G., Bilgen, S., "AiOLOs: Yazılım Geliştiren Organizasyonlarda Örgütsel Öğrenmeyi Değerlendirme Modeli", 7. Ulusal Yazılım Mühendisliği Sempozyumu (UYMS13), İzmir, 25-28 September 2013.

7.6 Diğer Yayınlar.

7.7 Uluslararası atıflar

<u>Alıntı endeksleri</u>	Hepsi	2012 yılından 23/7/2017 tarihine kadar
<u>Alıntılar</u>	438	275
<u>h-endeksi</u>	12	8
<u>i10-endeksi</u>	15	7

8. Projeler

9. İdari Görevler

2016- halen: Okan Üniversitesi Mühendislik Fakültesi Dekanı V.

2014-2016: Yeditepe Üniversitesi Bilgisayar Mühendisliği Bölüm Başkanı

2003-2004: ODTÜ Enformatik Enstitüsü Müdür Yardımcısı

1997-2003: ODTÜ Enformatik Enstitüsü Bilişim Sistemleri Anabilim Dalı Başkanı

10. Bilimsel Kuruluşlara Üyelikler

11. Ödüller

12. Son iki yılda verdiğiniz lisans ve lisansüstü düzeydeki dersler için aşağıdaki tabloyu doldurunuz.

Semih Bilgen YÖK CV Son iki yılda verdiği dersler 23-7-2017

<i>Akademik Yıl</i>	<i>Dönem</i>	<i>Dersin Adı</i>	<i>Haftalık saat Teorik+Uygulama</i>	<i>Öğrenci Sayısı</i>
2015-2016 (Yeditepe, BMB)	Güz	CSE 544 Advanced Topics in Software Engineering	3+0	5
	İlkbahar	CSE 101 Introduct,ion to Computer Engineering and Algorithms	3+2	45
		CSE 344 Software Engineering	3+1	38
		CSE 644 Advanced Topics in Information Systems: Big Data Management	3+0	4
		CSE 590 Research Seminar	1	2
2016-2017 (Okan Ü, BMB)	Güz	BİL 313 Otomata Teorisi	3+0	22
		CENG 313 Automata Theory	3+0	18
	Bahar	BİL 214 İşletim Sistemleri	3+0	21
		CENG 214 Operating Systems	3+0	20
		BİL 590 Yüksek Lisans Tezi	0+1	1