

## Prof. SEMİH BİLGEN

### Personal Information

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### Advising Theses

- ÇETİN Y., BİLGEN S., Data quality assessment in credit risk management by customized total data quality management approach, Postgraduate, M.İlyas(Student), 2016
- BİLGEN S., Data abstraction method for model checking of real-time systems, Doctorate, M.Dursun(Student), 2015
- BİLGEN S., Comparative evaluation of command distribution via DDS and CORBA in a software reference architecture, Postgraduate, M.Berk(Student), 2014
- BİLGEN S., Cloud computing effectiveness assessment /, Doctorate, S.Yarlıkaş(Student), 2014
- BİLGEN S., A Decision support model for adopting software product line engineering /, Doctorate, E.Tüzün(Student), 2014
- BİLGEN S., Investigation of the effects of structural characteristics of object-oriented software on fault-proneness, Postgraduate, H.Gölcük(Student), 2014
- BİLGEN S., Cost of quality for crowdsourcing management /, Doctorate, D.İren(Student), 2014
- BİLGEN S., An Action research of achievements in a software product line implementation, Postgraduate, M.Erdem(Student), 2014
- BİLGEN S., Performance evaluation of an underwater acoustic sensor network communication protocol, Postgraduate, D.Acar(Student), 2014
- BİLGEN S., A Study on quality assessment on mobile B2C applications, Postgraduate, E.Yıldız(Student), 2014
- BİLGEN S., A Framework for qualitative assessment of domain specific languages, Doctorate, G.Kahraman(Student), 2013
- BİLGEN S., Investigation of the effects of reuse on software quality in an industrial setting, Postgraduate, B.Deniz(Student), 2013
- BİLGEN S., Remotely powered underwater acoustic sensor networks, Doctorate, A.Bereketli(Student), 2013
- BİLGEN S., Use of design patterns in non-object oriented real-time software, Postgraduate, A.Çiftçi(Student), 2013
- BİLGEN S., Testing effectiveness and effort in software product lines, Postgraduate, M.Burkay(Student), 2013
- BİLGEN S., Use of project similarity for software development time estimation, Doctorate, S.Yılmaz(Student), 2013
- BİLGEN S., Effects of SPL domain engineering on testing cost and maintainability, Postgraduate, Z.Şenbayrak(Student), 2013
- BİLGEN S., Performance evaluation of a new cross layer protocol for sink powered underwater acoustic sensor networks, Postgraduate, H.Türken(Student), 2013
- BİLGEN S., A Qualitative model of the critical success factors for the effectiveness of information systems outsourcing, Doctorate, E.Uçar(Student), 2012
- BİLGEN S., Organizational learning assessment in software development organizations, Doctorate, O.Chouseinoglou(Student), 2012
- BİLGEN S., UML-Based functional system testing, Postgraduate, S.Sarıca(Student), 2011
- BİLGEN S., Modeling and assessment of the effectiveness of government information systems, Doctorate, A.Nusret(Student), 2011
- BİLGEN S., A verification approach for dynamics of metamodel based conceptual models of the mission space, Doctorate, U.Eryılmaz(Student), 2011
- BİLGEN S., Federated simulation of network performance using packet flow modeling, Doctorate, T.Demirci(Student), 2010

BİLGEN S., Effect of some software design patterns on real time software performance, Postgraduate, M.Ayata(Student), 2010

BİLGEN S., Effects of parallel programming design patterns on the performance of multi-core processor based real time embedded systems, Postgraduate, B.Kekeç(Student), 2010

BİLGEN S., Time synchronization in measurement networks, Postgraduate, Z.Evren(Student), 2010

BİLGEN S., Non-functional variability management by complementary quality modeling in a software product line, Postgraduate, Ö.Gürses(Student), 2010

BİLGEN S., Factors that affect the duration of cmmi-based software process improvement initiatives, Doctorate, Y.Karagül(Student), 2009

BİLGEN S., Variability modeling in software product lines, Postgraduate, B.Can(Student), 2009

BİLGEN S., An assessment model for web-based information system effectiveness, Doctorate, G.Tokdemir(Student), 2009

BİLGEN S., The effect of software design patterns on object-oriented software quality and maintainability, Postgraduate, T.Türk(Student), 2009

BİLGEN S., Security and quality of service for wireless sensor networks, Doctorate, E.Tomur(Student), 2008

BİLGEN S., An inspection approach for conceptual models of the mission space in a domain specific notation, Doctorate, Ö.Özgür(Student), 2008

BİLGEN S., The effects of test driven development on software productivity and software quality, Postgraduate, C.Ünlü(Student), 2008

BİLGEN S., Improvements to neural network based restoration in optical networks, Postgraduate, F.Türk(Student), 2008

BİLGEN S., Software engineering process improvement, Postgraduate, B.Sezer(Student), 2007

BİLGEN S., Measurement based software process improvement, Postgraduate, A.Ener(Student), 2007

BİLGEN S., Strategic and financial motivation and information systems outsourcing success, Postgraduate, S.Yarlıkaş(Student), 2007

BİLGEN S., Software process improvement in a software development environment, Postgraduate, Z.Konuralp(Student), 2007

BİLGEN S., Archetype based domain modeling for health information systems, Doctorate, K.Atalağ(Student), 2007

BİLGEN S., Tool support for distributed agile software development, Postgraduate, A.Serkan(Student), 2006

BİLGEN S., Performance analysis of a power aware routing protocol for ad hoc networks, Postgraduate, M.Akif(Student), 2006

BİLGEN S., A new stack architecture for sensor networks, Postgraduate, M.Eroğlu(Student), 2006

BİLGEN S., Improvement proposal for a software requirements management process, Postgraduate, P.İşıl(Student), 2006

BİLGEN S., Data sharing and access with a corba data distribution service implementation, Postgraduate, M.Dursun(Student), 2006

BİLGEN S., Success factors of software development in a distributed setting : a collective case study, Postgraduate, B.Bulğurcu(Student), 2006

BİLGEN S., PB-ISAM : a process-based framework for information systems effectiveness assessment in organizational contexts, Doctorate, S.Özkan(Student), 2006

BİLGEN S., Software process improvement based on static process evaluation, Postgraduate, H.Seçkin(Student), 2006

BİLGEN S., The effect of design patterns on object-oriented metrics and software error-proneness, Postgraduate, B.Aydınöz(Student), 2006

BİLGEN S., Information systems success and expectations for information technology investment: case study, Postgraduate, Ç.İşık(Student), 2005

BİLGEN S., Simulation based investigation of mobile improvements, Postgraduate, E.İlker(Student), 2005

BİLGEN S., Software subcontracting success: a case study on the relationship between project success and process metrics, Postgraduate, K.Yüçetürk(Student), 2005

BİLGEN S., Software reliability assessment, Postgraduate, D.Kaya(Student), 2005

BİLGEN S., JDP : a tool support pair programming in distributed environments, Postgraduate, H.Turan(Student), 2005

BİLGEN S., Management tool support for software aquisition and information systems outsourcing projects for Turkish land forces command, Postgraduate, A.Pınar(Student), 2004

BİLGEN S., A web-based public procurement system, Postgraduate, H.Karahan(Student), 2004

BİLGEN S., Test driven development of embedded systems, Postgraduate, M.İspir(Student), 2004

BİLGEN S., Simulation based investigation of an improvement for faster SIP re-registration, Postgraduate, E.Tanrıverdi(Student), 2004

BİLGEN S., Information system effectiveness assessment framework for Turkish Army, Postgraduate, M.Çakır(Student), 2004

BİLGEN S., An information system re-structuring study for the financial inspection board, Postgraduate, M.Yıldırım(Student), 2004

BİLGEN S., Design and implementation of a software development process measurement system, Postgraduate, Ö.Eralp(Student), 2004

BİLGEN S., Wireless networks performance study, Postgraduate, Y.Taşdelen(Student), 2004

BİLGEN S., Mobile network traffic modelling, Postgraduate, Y.Çakmak(Student), 2004

BİLGEN S., Success factors in public information systems outsourcing : a case study, Postgraduate, İ.Vural(Student), 2004

BİLGEN S., Distributed restoration in optical networks using feed-forward neural networks, Doctorate, D.Gökşık(Student), 2003

BİLGEN S., Adoption and utilization of information systems in an emerging Turkish industrial rown : a case study on Gaziantep, Postgraduate, Y.Salihoğlu(Student), 2003

BİLGEN S., A performance study of real-time ip multicasting., Postgraduate, T.Demirci(Student), 2002

BİLGEN S., An approach for defensive information warfare in the Turkish land forces command, Postgraduate, F.Özcan(Student), 2002

BİLGEN S., A proposed model for Turkish land forces command software intensive systems acquisition process, Postgraduate, N.Bilir(Student), 2002

BİLGEN S., An investigation of wap transaction protocol performance for packet radio networks., Postgraduate, G.Kahraman(Student), 2002

BİLGEN S., An applied study of information system effectiveness, Postgraduate, G.Sungur(Student), 2001

BİLGEN S., Statistically predictive optimal routing and wavelength assignment in all-optical networks, Doctorate, A.Koçyiğit(Student), 2001

BİLGEN S., An Algorithm for comparison of MPEG7 descriptor structures, Postgraduate, D.Arda(Student), 2001

BİLGEN S., Wavelength converter placement in all-optical networks, Postgraduate, E.Mındıkoğlu(Student), 2001

BİLGEN S., Proposal of vendor evaluation framework for IS/IT outsourcing, Postgraduate, Z.Zerrin(Student), 2001

BİLGEN S., The Software requirements specifications and software design decriptions of a quality informationsystem for Turkish Military Academy, Postgraduate, C.Ercan(Student), 2001

BİLGEN S., Information system security, Postgraduate, O.Yücel(Student), 2001

BİLGEN S., Effects of optical memory management schemes on WDM packet switch performance, Postgraduate, B.Oğuzman(Student), 2000

BİLGEN S., Simulation-based study of effects of topology on the performance of packet and all-optical networks, Postgraduate, N.Savaşır(Student), 2000

BİLGEN S., An investigation multiplexing networks under internet traffic, Postgraduate, A.Utku(Student), 2000

BİLGEN S., Statistical self-organizing map, Doctorate, E.Germen(Student), 1999

BİLGEN S., Embedded web server design for management of real time systems, Postgraduate, N.Ayaydın(Student), 1999

BİLGEN S., A modification for an optimal routing algorithm for all-optical networks, Postgraduate, K.Yıldız(Student), 1999

BİLGEN S., Performance evaluation of TCP over ATM, Postgraduate, S.Tunalılar(Student), 1998

BİLGEN S., Alternative transform techniques for musical signal processing., Postgraduate, G.Günce(Student), 1998

BİLGEN S., An implementation of HL7, health care data exchange standard, Postgraduate, A.Müge(Student), 1998

BİLGEN S., A tonal context model for musical sound processing, Doctorate, M.Özgür(Student), 1997

BİLGEN S., Multiprocessor message traffic distribution modeling, Postgraduate, C.Fitoz(Student), 1997

BİLGEN S., An HF gateway to local area network interface design, Postgraduate, H.Batkhan(Student), 1997

BİLGEN S., Performance evaluation of packet radio networks with TDMA and virtual circuits, Postgraduate, B.Bilir(Student), 1997

BİLGEN S., Parallel processing applications of string search algorithms an a transputer based network, Postgraduate, R.Murat(Student), 1997

BİLGEN S., Computerized real time musical sound recognition in a noisy environment, Postgraduate, S.Kezer(Student), 1996

BİLGEN S., An Asynchronous transfer mode-based interconnection architecture for multicomputer communication, Doctorate, M.Salamah(Student), 1996

BİLGEN S., Parallel DQDB processor implementation and performance evaluation, Postgraduate, Y.Arslan(Student), 1996

BİLGEN S., A new algebraic language erpal and translation of a subset of SDL-92 ERPAL, Postgraduate, H.Yenigün(Student), 1995

BİLGEN S., Security in IP networks and an authentication server design, Postgraduate, M.Şentürk(Student), 1995

BİLGEN S., Adaptive hybrid ARQ schemes for slowly time-varying communication channels, Doctorate, T.A.(Student), 1994

BİLGEN S., A parallel architecture for DQDB protocol processing, Doctorate, L.Kuşdemir(Student), 1994

BİLGEN S., Object-oriented software design and implementation of a real-time telecommunications controller, Postgraduate, M.Ün(Student), 1991

BİLGEN S., Conformance testing of a standard virtual terminal protocol, Postgraduate, S.Özyıldırım(Student), 1991

BİLGEN S., Recognition and transcription of one part melody with computer, Postgraduate, E.Germen(Student), 1991

BİLGEN S., A message handling system implementation X-400 on token ring, Postgraduate, Y.Yardımlı(Student), 1990

BİLGEN S., An approximate solution of the resequencing problem in packet-switching networks, Postgraduate, O.Altıntaş(Student), 1990

BİLGEN S., Implementation of (63,43) reed-solomon decoder using the Z80 general purpose microprocessor, Postgraduate, F.Taner(Student), 1990

BİLGEN S., A study on large and mesh-structured circuit switching network design, Postgraduate, T.Akar(Student), 1990

BİLGEN S., Structural performance analysis of the generalized hypercube multiprocessor network, Postgraduate, M.Salamah(Student), 1990

BİLGEN S., Performance evaluation of a packet switched data network through simulation, Postgraduate, Y.Bağrıaçık(Student), 1990

BİLGEN S., Computer analysis of musical sound, Postgraduate, M.Özgür(Student), 1989

BİLGEN S., Implementation of a standard virtual terminal protocol., Postgraduate, O.Ekinci(Student), 1988

BİLGEN S., A new encryption algorithm with signature for communication security, Postgraduate, A.Arda(Student), 1988

BİLGEN S., Universal eeprom programmer design, Postgraduate, L.Neşet(Student), 1987

BİLGEN S., Basic interpreter for unix based system, Postgraduate, A.S(Student), 1987

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A framework for qualitative assessment of domain-specific languages**  
Kahraman G., Bilgen S.  
SOFTWARE AND SYSTEMS MODELING, vol.14, no.4, pp.1505-1526, 2015 (SCI-Expanded)
- II. **AiOLoS: A model for assessing organizational learning in software development organizations**  
Chouseinoglou O., Iren D., KARAGÖZ N. A., Bilgen S.  
INFORMATION AND SOFTWARE TECHNOLOGY, vol.55, no.11, pp.1904-1924, 2013 (SCI-Expanded)
- III. **Remotely Powered Underwater Acoustic Sensor Networks**  
Bereketli A., Bilgen S.  
IEEE SENSORS JOURNAL, vol.12, no.12, pp.3467-3472, 2012 (SCI-Expanded)
- IV. **A framework for reviewing domain specific conceptual models**  
TANRIÖVER Ö. Ö., Bilgen S.  
COMPUTER STANDARDS & INTERFACES, vol.33, no.5, pp.448-464, 2011 (SCI-Expanded)
- V. **Evaluation of the Turkish translation of the Minimal Standard Terminology for Digestive Endoscopy by development of an endoscopic information system**  
Atalag K., Bilgen S., Guer G., Boyacioglu S.  
TURKISH JOURNAL OF GASTROENTEROLOGY, vol.18, no.3, pp.157-164, 2007 (SCI-Expanded)
- VI. **Distributed restoration in optical networks using feed-forward neural networks**

Karpat D. G., Bilgen S.

PHOTONIC NETWORK COMMUNICATIONS, vol.12, no.1, pp.53-64, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A maturity based qualitative information systems effectiveness evaluation of a public organization in Turkey**  
Ozkan S., Cakir M., Bilgen S.  
Journal of Cases on Information Technology, vol.10, no.3, pp.58-71, 2008 (ESCI)
- II. **Process based information systems evaluation: Towards the attributes of "pRISE"**  
Özkan S., Hackney R., Bilgen S.  
Journal of Enterprise Information Management, vol.20, no.6, pp.700-725, 2007 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **A Case Study on Web-Based Information System Evaluation**  
TOKDEMİR G., Bilgen S., Ercil Y.  
8th European Conference on IS Management and Evaluation (ECIME), Belgium, 11 - 12 September 2014, pp.244-252
- II. **Cost Models of Quality Assurance in Crowdsourcing**  
Iren D., Bilgen S.  
5th IEEE International Conference on Communications and Electronics (ICCE), Dha-Nang, Vietnam, 30 July - 01 August 2014, pp.504-509
- III. **An Empirical Study of Software Reuse and Quality in an Industrial Setting**  
Deniz B., Bilgen S.  
14th International Conference on Computational Science and Its Applications (ICCSA), Guimaraes, Portugal, 30 June - 03 July 2014, vol.8583, pp.508-510
- IV. **Assessing Organizational Learning in IT Organizations: An experience report from industry**  
Ozen G., KARAGÖZ N. A., Chouseinoglou O., Bilgen S.  
Joint Conference of the 23rd International Workshop on Software Measurement and the 8th International Conference on Software Process and Product Measurement (IWSM-MENSURA), Ankara, Turkey, 23 - 26 October 2013, pp.253-258
- V. **Cross Layer Power Adaptive CSMA/CA for Sink Powered Underwater Acoustic Sensor Networks**  
Bereketli A., Turken H., BİLGEN S.  
12th Annual Mediterranean Ad Hoc Networking Workshop (MED-HOC-NET), Ajaccio, France, 24 - 26 June 2013, pp.26-33
- VI. **Process based public value and effectiveness of government information systems: The Ministry of Finance experience, Turkey**  
Nusret Güçlü A., Bilgen S.  
2010 4th International Conference on Research Challenges in Information Science, RCIS 2010, Nice, France, 19 - 21 May 2010, pp.425-432
- VII. **An inspection approach for conceptual models in notations derived from UML: A case study**  
Tanrioever O., Bilgen S.  
22nd International Symposium on Computer and Information Sciences, Ankara, Turkey, 7 - 09 November 2007, pp.57-58
- VIII. **National PQ monitoring network for Turkish electricity transmission system**  
Demirci T., Kalaycioglu A., Salor O., Pakhuylu S., Dagli M., Kara T., Aksueyek H. S., Topcu C., Polat B., Bilgen S., et al.  
24th IEEE Instrumentation and Measurement Technology Conference, Warszawa, Poland, 1 - 03 May 2007, pp.2199-2200

## Supported Projects

BİLGEN S., Project Supported by Higher Education Institutions, Kitle Kaynaklı Çalışma Yönetim Metodolojisi Geliştirme, 2013 - 2013

## Metrics

Publication: 16

Citation (WoS): 103

Citation (Scopus): 118

H-Index (WoS): 4

H-Index (Scopus): 6