

Curriculum Vitae

Sedigheh Khoshnevis

Faculty Member at the Islamic Azad University, Shahr-e-Qods Branch

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General Info

Website:

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Educational Career in Computer Engineering – Software

- B.Sc.: Tarbiat Moallem (Kharazmi) University, Tehran, 1999-2004
- M.Sc.: Islamic Azad University, Science and Research Branch, Tehran, 2005-2008
- Ph.D.: Shahid Behshti University, Tehran, since 2009

Research and Publications

Research Interests:

- Software Product Line Engineering
- Service-Oriented Architecture
- Software Architecture
- Model-Driven Architecture
- Software Test
- Software Formal Methods
- Software Evolution
- Applications of Evolutionary Computing in Software Engineering
- Software as a Service (SaaS)
- Enterprise Architecture

Publications:

Journal Papers:

1. **S.Khoshnevis** and F.Shams; Automating Identification of Services and their Variability for Product Lines Using NSGA-II, Frontiers of Computer Science, 2015, (under revision) (ISI).

2. **S.Khoshnevis** and F.Shams; A method for controlling consistency of architecture variability models in service-oriented product lines using Boolean constraint satisfiability problem solving, *Formal Aspects of Computing*, 2015, (under review) (ISI).
3. **S.Khoshnevis** and F.Shams; A Method for Extracting Variability Model of Service-Oriented Software Product Lines, *Journal of Electronic Industries*, 2015, Vol.5, No.4, pp.5-18 (In Persian) (ISC).
4. **S.Khoshnevis** and F.Shams; Identifying Variable Services for Multi-Tenant SaaS Applications as a Service-Oriented Product Line Using MOEA/D, *International Journal of Software Engineering and Its Applications*, 2015 (Scopus) (under publish).
5. **S.Khoshnevis**, F.Shams and N.Avazpour Kakroudi; A Systematic Literature Review of Variability Management in Service-Oriented Products and Product Lines, *International Journal of Basic Sciences and Applied Research*, Vol. 4, No. 1, pp. 56-75, 2015 (ISC).
6. **S.Khoshnevis**, F.Rabeifar, "Toward Knowledge Management as a Service in Cloud-Based Environments", *International Journal of Mechatronics, Electrical and Computer Technology*, Vol. 2, No. 4, pp. 88-110, 2012 (ISC).

Conference Papers:

1. **S.Khoshnevis**, F.Shams; Linear Evolution of Domain Architecture in Service-Oriented Software Product Lines, *Pre-proceedings of Fundamentals of Software Engineering, FSEN15*, 2015 (Post-proceedings to appear in Springer LNCS), pp.63-79.
2. **S.Khoshnevis**, F.Shams; A method for formal consistency evaluation of architecture-level variability model in service-oriented product lines, *20th Computer Society of Iran Computer Conference (CSICC)*, 2015 (In Persian).
3. **S.Khoshnevis**, F.Shams; Linear Evolution of Domain Architecture in Service-Oriented Software Product Lines, *Fundamentals of Software Engineering (FSEN)*, Springer LNCS series, IPM, Tehran, 2015 (accepted for publication).
4. **S.Khoshnevis** and F.Shams, A business goal-based method to identify architecture-level variability model in service-oriented product families, *Computer Society of Iran Computer Conference (CSICC)*, 2014 (In Persian).
5. S.Saadatbakht, **S.Khoshnevis**, H.Haghighi, Extracting business process family models in software product line based on business process models, *Computer Society of Iran Computer Conference (CSICC)*, 2014 (In Persian).
6. **S.Khoshnevis** and F.Shams; An Approach for Optimal Linear Evolution of Architecture-Level Variability in Service-Oriented Product Lines, *2nd computer science conference on Computer and Information Technology (CSCCIT2014)*, Tabriz, 2014 (In Persian).
7. **S.Khoshnevis**, An introduction to variability management in service-oriented product line, a research in progress *1st National Conference on New Approaches in Computer Engineering and Information Retrieval*, Islamic Azad University, Roudsar-Branch, 2013 (In Persian).
8. **S.Khoshnevis**, H.Serajzadeh and F.Shams; Service-Oriented Product Line framework to support dynamic product line configuration, *1st National Conference on New Approaches*

in Computer Engineering and Information Retrieval, Islamic Azad University, Roudsar-Branch, 2013.

9. S.Saadatbakht, **S.Khoshnevis**; Identifying business process variability model based on business process diagrams in a software product line, First national conference on innovations in computer engineering and information technology, 2013 (In Persian).
10. F.Dehghanfard, **S.Khoshnevis**, H.Haghighi; A solution to consistency checking in business process family models, First national conference on innovations in computer engineering and information technology, 2013 (In Persian).
11. **S.Khoshnevis**, K.Sedighiani, A hybrid Evolutionary Method to generate a fuzzy knowledge-base automatically, 1st National Conference on New Approaches in Computer Engineering and Information Retrieval, Islamic Azad University, Roudsar-Branch, 2013.
12. **S.Khoshnevis**, "An Approach to Variability Management in Service-Oriented Product Lines", International Conference of Software Engineering (ICSE'12) Doctoral Symposium, Zurich, Switzerland, 2012.
13. P.Jamshidi, **S.Khoshnevis**, R.Teimourzadegan, A.Nikraves and F.Shams, "An Automatic Model Transformation of Business Model to Service Model", Principles of Engineering Service Oriented Systems, Vancouver, Canada, 18-19 May 2010.
14. M.Fahmideh Gholami, J.Habibi, F.Shams and **S. Khoshnevis**, "Criteria-Based Evaluation Framework for Service-Oriented Methodologies", UKSim2010, IEEE 12th international conference on computer modeling and simulation, England, 24-26 march 2010.
15. A. Khoshkbarforousha, P. Jamshidi, A. Nikraves, **S. Khoshnevis**, F. Shams, "A Metric for Measuring BPEL Process Context-Independency", IEEE SOCA, 2009.
16. **S.Khoshnevis**, F.Shams Aliee, and P.Jamshidi, "Model driven approach to Service oriented Enterprise Architecture", IEEE Asia-Pacific Services Computing Conference, 2009 (APSCC 2009), Sweden, 7-11 December 2009.
17. P.Jamshidi, **S.Khoshnevis**, R.Teimourzadegan, A.Nikraves, A. Khoshkbarforousha, and F. Shams, "ASSM: Toward an automated method for service specification", IEEE Asia-Pacific Services Computing Conference, 2009 (APSCC 2009), 7-11 December 2009.
18. P.Jamshidi, F.Shams, **S.Khoshnevis**, R.Teimourzadegan, and A.Nikraves, "Rearchitecting Meta-Modeling Foundation: A Formal Approach", Proceedings of 18th International Conference on Software Engineering and Data Engineering (SEDE-2009), Las Vegas, Nevada, USA, June 22-24, 2009.
19. P.Jamshidi, **S.Khoshnevis**, R.Teimourzadegan, A.Nikraves, and F.Shams, "Toward Automatic Transformation of Enterprise Business Model to Service Model", ICSE'09 Workshop, Vancouver, Canada, May 18-19, 2009.
20. P.Jamshidi, **S.Khoshnevis**, R.Teimourzadegan, A.Nikraves, and F.Shams, "An Automated Method for Service Specification", The Warm-up Workshop for ACM/IEEE ICSE 2010, Strand, Cape Town, South Africa, April 1-3, 2009.

21. **S.Khoshnevis**, P.Jamshidi, A.Nikravesh, A.Khoshkbarforoushha, R.Teimourzadegan, F.Shams, "ASMEM: A method for automating model evolution of service oriented systems", 3rd int'l workshop on a research agenda for Maintenance and Evolution of Service-Oriented systems (MESOA 2009), Carnegi Melon university, SEI, Canada, 2009.
22. **S.Khoshnevis**, F.Shams, P.Jamshidi, "A Model-Driven Approach to Service-Oriented Enterprise Architecture using SOEA framework", The 1st national conference on enterprise architecture application, Isfahan, 2009 (In Persian).
23. **S.Khoshnevis**, F.Shams, "Method for Approaching Service-Oriented Enterprise Architecture Based on Zachman Framework", Computer Society of Iran Computer Conference (CSICC) 2008 (In Persian).
24. F.Shams, **S.Khoshnevis**, "Toward Service-Oriented Enterprise Architecture", Police and ICT, 2008 (In Persian).

Books:

- F.Rabeifar, **S.Khoshnevis**, M.Shafipoor, "English for Computer Students", ISBN: 978-964-981-982-2, Jangal Publication, 2013.

Research Projects:

- "A model-driven framework for automatic transformation of enterprise business models to enterprise service models" (as Researcher, Shahid Beheshti University), 2008.

Other:

- Member of Automated Software Engineering Research (ASER) group at Shahid Beheshti University (<http://aser.sbu.ac.ir>), since 2008
- Participating in some M.Sc. theses, some indexed in <http://isa.sbu.ac.ir> since 2009
- Reviewer of some journals and conferences
- Scientific organizer for "IT in Universities of Iran" conference, Shahr-e-Qods, 2011
- Scientific committee member at the 1st conference of "Mechatronics, Electrical and Computer Engineering", Shahr-e-Qods, 2012

Teaching Career

Universities:

- Shahr-e-Qods Branch of Islamic Azad University (Since 2006)
- Shahid Beheshti University (Invited Lecturer)
- Kharazmi University (Invited Lecturer)

Courses Taught:

- Software Engineering (1) and (2)
- Software Analysis and Design (Kharazmi University)
- Software Design Principles (Shahid Beheshti University)
- Database Design Principles

- Database Lab.
- Specialized English for Computer Engineering
- Scientific Presentation Principles
- Data Structures
- Advanced Programming, Etc.

Honors

- Ranked 1st in Ph.D. entrance exam of Shahid Beheshti University (software engineering), among about 100, 2009
- Ranked 17th in M.Sc. entrance exam for Azad university, 2005
- Ranked 891st in B.Sc. entrance exam of governmental universities among about 100.000, 1999

Industrial Experiences

- Software analysis, design, programming, testing and maintaining in office automation, inventory, and accounting systems, and acquaintance with many other businesses and systems (development with Oracle Developer) in Paxan, Detergent Industry Management Company (Paxan Holding), Computer and Mechanized Systems Co. and Rayan Pardazan
- IT Master Planning (for Behpakhsh Co.)
- Enterprise Architecture (for Behpakhsh Co.)
- ERP Outsourcing Project (Oracle ERP) (for Paxan), and some more.

Foreign Languages

English:

- TOEFL (PBT): 603/677
- TOLIMO: 578/677

Misc. Skills

Research and Development:

- EndNote
 - Mendeley
 - SPSS
 - UML and RUP, SCRUM, XP
 - IBM Software Architect and Rational Suite
 - Eclipse
 - jMetal
 - Alloy Analyzer
 - ATL and QVT
 - Oracle Developer and SQL Server
 - Visual Studio.Net
 - Etc.
- + Some research and teaching skills