# **Curriculum Vitae**

Last updated July, 2017

# Baris Özkan

# **PERSONAL DETAILS**

Address: Department of Information Systems Engineering

**Atilim University** 

06836, Golbasi, Ankara, Turkey

Phone: (Work) +90 312 586 8724 E-mail address: <u>baris.ozkan@atilim.edu.tr</u>

Personal web page: http://www.atilim.edu.tr/~baris.ozkan

# **EDUCATION**

• 2006-2012 PhD in Information Systems, Middle East Technical University, Turkey

• 2003-2006 MSc in Software Management, Middle East Technical University, Turkey

• 1996-2000 BSc in Industrial Engineering, Middle East Technical University, Turkey

### **EMPLOYMENT**

Position	Organization	Time
Visiting Researcher/Lecturer	Information Systems Group	Apr-July, 2017
	Department of Industrial Engineering & Innovation	
	Sciences, Eindhoven University of Technology, Netherlands	
Faculty Member	Department of Information Systems Engineering	2013
(Asst. Prof.)	Atilim University, Turkey	
Research Scholar	Software Management Research Group, Informatics Institute, Middle East Technical University, Turkey	2009-2012
Independent IT Management Consultant	Turkish Exim Bank, Turkey	2008-2009
Software Architect & Technical Lead	Pagos Inc, USA (Software Services Company)	2006-2008
Software Developer	Elikasu Tech. Solutions A.S (System Integration Consultancy)	2004-2006
Business Analyst	Infopark A.S. (Software Consultancy Company)	2001-2004

# **RESEARCH FIELDS**

- Software Measurement & Estimation
- Requirements Engineering
- Software Product & Process Quality and Improvement
- Business Process Management
- IT & SW Governance, Risk and Compliance
- Sustainable ICT

#### **PUBLICATIONS**

#### **Journal**

Vahid Garousi, Kai Petersen, Baris Özkan: Challenges and best practices in industry-academia collaborations in software engineering: A systematic literature review. Information & Software Technology 79: 106-127,2016

Baris Özkan, Alok Misra, Problemy Ekorozwoju/ Problems of Sustainability, A Curriculum on Sustainable Information Communication Technology, Vol. 10. No. 2, 2015

### **Book Chapters**

Özkan B., Albayrak Ö., Demirörs O. (2014). Software Quality and Model Based Process Improvement, In A. Tucker, T. Gonzalez, H. Topi and J. Diaz-herrera (Eds.), Computer Science and Engineering Handbook, 3rd Edition, Taylor&Francis.

Özkan, B. & Demirörs, O. (2011). Formalization Studies in Functional Size Measurement. In A. Dogru, & V. Biçer (Eds.), Modern Software Engineering Concepts and Practices: Advanced Approaches (pp. 242-262), IGI Global.

### **International Conference Proceedings**

Ayça Tarhan, Barış Özkan and Gonca Canan İçöz, A Proposal on Requirements for COSMIC FSM Automation from Source Code, IWSM/MENSURA 2016, Berlin, Germany.

Baris Ozkan ,Onur Demirörs, On the Seven Misconceptions about Functional Size Measurement, IWSM/MENSURA 2016, Berlin, Germany.

Hamdi Demirel, Barış Özkan, Automated Functional Size Measurement for Three-Tier Object Relational Mapping Architectures, IWSM 2015, Cracow, Poland.

Önder Eren, Barış Özkan, Onur Demirörs, PL FSM: An Approach and a Tool for the Application of FSM in SPL Environments, SEAA 2015, Maderia, Portugal.

Burak Keser, Taylan Iyidogan, and Baris Ozkan. "ASSIST: An Integrated Measurement Tool." IWSM/MENSURA- 2013, Ankara, Turkey

Özden Özcan Top, Baris Özkan, Mina Nabi, Onur Demirörs: Internal and External Software Benchmark Repository Utilization for Effort Estimation. IWSM/Mensura 2011: 302-307

Özkan, B., Demirörs O., & Özkaya A. (2010). Estimating Software Effort in a Change-intensive Applications Environment: An Experience Report. IWSM / MetriKon / Mensura 2010.

Ungan, E., Özcan Top Ö., Özkan B., & Demirörs O. (2010). Evaluation of Reliability Improvements for COSMIC Size Measurement Results. IWSM / MetriKon / Mensura 2010

Özden Özcan Top, Onur Demirörs, Baris Özkan: Reliability of COSMIC Functional Size Measurement Results: A Multiple Case Study on Industry Cases. EUROMICRO-SEAA 2009: 327-334

Baris Özkan, Onur Demirörs: Formalization Studies in Functional Size Measurement: How Do They Help? IWSM/Mensura 2009: 197-211

Erdir Ungan, Onur Demirörs, Özden Özcan Top, Baris Özkan: An Experimental Study on the Reliability of COSMIC Measurement Results. IWSM/Mensura 2009: 321-336

Baris Özkan, Oktay Türetken, Onur Demirörs: Software Functional Size: For Cost Estimation and More. EuroSPI 2008: 59-69

Oktay Türetken, Özden Özcan Top, Baris Özkan, Onur Demirörs: The Impact of Individual Assumptions on Functional Size Measurement. IWSM/Metrikon/Mensura 2008: 155-169

Oktay Türetken, Onur Demirörs, Çigdem Gencel, Özden Özcan Top, Baris Özkan: The Effect of Entity Generalization on Software Functional Sizing: A Case Study. PROFES 2008: 105-116

#### **National Conference Proceedings**

Ali Yazici, Alok Misra, Baris Ozkan, Semih Cetin, Türkiye'de Yazılımın Temel Gösterge Alanlarda Gelisimi, UYMS 2016, Canakkale.

Hamdi Demirel, Barış Özkan, Çok Katmanlı Nesne-Ilişkisel Eşleme Mimarisi İçin Otomatik Fonksiyonel Büyüklük Ölçümü. UYMS 2015. İzmir .

Önder Eren, Onur Demirörs, Baris Özkan, Yazılım Ürün Hatları için Otomatik İşlevsel Büyüklük Ölçümü Yaklaşımı. UYMS 2014, Cyprus.

Barış Özkan, Erdir Ungan, Onur Demirors, İşlevsel Büyüklük Ölçüm Yöntemleri ve Referans Veri Kümelerinin Yazılım Mimarileri Açısından Değerlendirilmesi, UYMK 2012, İzmir.

Barış Özkan, Onur Demirörs: İşlevsel Büyüklük Ölçümünde Yedi Efsane, UYMS 2011, Ankara.

Barış Özkan, Onur Demirörs: Değişiklik Yoğun Bir Yazılım Ortamında İşgücü Kestirimi, YKGS 2010, İstanbul.

Barış Özkan, Onur Demirörs: İşlevsel Büyüklük Ölçümlerinde Formalizasyon Çalışmaları ve Bir İşlevsel Büyüklük Ölçüm Aracı, UYMS 2009, İstanbul.

Erdir Ungan , Onur Demirörs , Bariş Özkan , COSMIC İşlevsel Büyüklük Ölçüm Sonuçlarında Gözlenen Sapmalar Üzerine Bir Deney Çalışması, UYMS 2009, İstanbul.

Özden Özcan Top, Onur Demirörs, Bariş Özkan Özkan, COSMIC İşlevsel Büyüklük Ölçüm Sonuçlarının Güvenilirliği, UYMS 2009, İstanbul.

Barış Özkan, Oktay Türetken, Onur Demirörs: Yazılım Proje Yönetimi için Fonksiyonel Büyüklüğün Kullanımı. YKGS 2008, İstanbul.

# **SUPERVISION**

#### **Current Students**

Student Name	Research Field/Theme	Role	Institution
Abdulsalam Salim Tayyeb (MSc)	Business process model visual quality assessment	Supervisor	Atılım University
Bedirhan Akdogan (MSc)	Process framework for software testing outsourcing	Supervisor	Atılım University
Khalid Elatresh (MSc)	Information security management framework for VSE	Supervisor	Atılım University
Fatmanur Çolakoğlu (MSc)	Process based software measurement framework	Supervisor	Atılım University
Husam Haqaf (MSc)	Information security management	Supervisor	Atılım University
Barış Küçük (MSc)	Smell detection in software test code	Co-supervisor, joint with Dr. Vahid Garousi	Atılım University
Haitham Al-Tameemi (PhD)	Smart first aid system for the disabled	Co-supervisor, joint with Dr. Erman Erkan	Atılım University
Marwah Mushtaq Talib (MSc)	Requirement engineering for modular E-government services	Co-supervisor, joint with Dr. Atila Bostan	Atılım University

# **Previously Supervised Students**

Student Name	Thesis Title	Role	Institution
Hamdi Demirel (MSc)	Automated Functional Size	Supervisor	Atılım University
	Measurement for Multi-tier ORM		
	Architectures		
Önder Eren (MSc)	PL-FSM: A functional size	Co-supervisor, joint	Informatics
	measurement Approach for Software	with Dr. Onur	Institute
	Product Lines	Demirörs	METU

# **Previously-supervised Course-based MSc Students**

Student Name	Project Title	Institution
Emre Varışlı	Caching design decision technique for software performance testing	Atılım University
Musab Aldali	COBIT Capability Assessment Assistance Tool	Atılım University
Nasır Saad	Design and Implementation of an E-Archiving System For The Higher Institute of Computer Technology in Libya Benghazi.	Atılım University
Emin Orcun Mengenli	Using information systems in petroleum pipeline construction	Atılım University

#### **RESEARCH PROJECT EXPERIENCE**

**Project Details**: "Software Benchmark Dataset for Estimation and a Process Oriented Estimation Method", supported by The Scientific and Technological Research Council of Turkey (Project No: E109020) 2009-2011

Major Responsibilities: Requirements Development, Data Collection& Analysis, Process Design, Web-based Project Data Repository & Software Measurement Tool Development

**Project Details**: "Integrated Software Estimation Method and Toolset", supported by The Scientific and Technological Research Council of Turkey (Project No: E107010), 2007-2009

Major Responsibilities: Project Proposal Data Collection& Analysis, Size Measurement, Estimation Model Construction, Web-based Project data repository & Software Measurement Tool Development (Requirements Analysis, Specification and Implementation)

#### **INDUSTRY PROJECT EXPERIENCE**

Project Name	Project Organization
Process Analysis & Modeling for Regulatory Compliance Requirements	Development Bank of Turkey
Web-based Online Spreadsheet Service Development	Pagos Inc., USA
COBIT framework implementation (UNDP project)	Turkish Eximbank
Software Estimation Method Development for Banking Application Portfolio Development and Maintenance	Fintek A.S. (IT organization of second largest public bank in Turkey)
Process Modeling for Regional Development Agencies	Turkish Prime Ministry State Planning Organization
Assembly Line Monitoring System	TOYOTA Turkey
Continuous Acquisition Logistics Support (CALS), NATO Stock Number Compliance System	Turkish Aerospace Industries / Turkish General Staff/ Turkish Armed Forces

#### **TEACHING AND TRAINING SERVICES**

#### **Graduate Level**

- Advanced Topics in Software Engineering (SE 650), Fall 2015, Fall 2016
- Requirements Engineering (SE 560) Spring 2012, Fall 2015
- Business Process Management (ISE 516) Fall 2016
- Service Oriented Architecture and Business Process Management (SE 564) Fall 2013, 2014
- IT Strategy Planning and Governance (ISE 511) Spring 2013, 2014, 2016
- Graduate Seminar (IS590) Spring 2013
- Introduction to Computers & Programming (CMPE 101), Fall 2014,

### **Undergraduate Level**

- System Software Validation and Testing (SE 344), Spring 2015
- Database Design and Management (CMPE 341), Fall 2015
- Graduation(4th Year Capstone) Project (CMPE/SE/ISE 494) Fall 2016
- Project Orientation (CMPE/SE/ISE 493), Fall 2013, Spring 2013, Fall 2014
- Software Engineering (SE 346) Spring 2014, 2015
- Introduction to Software Engineering (SE 112), Spring 2012, 2013,
- Advanced Programming (BTP208) (Distance education) Spring 2014,2016

# **Corporate Trainings**

- Process Modeling
- Information Systems Audit
- Software Measurement and ISO 15939
- Software Process Improvement (CMMI, SPICE)
- Software Project Management
- Object Oriented Analysis and Design with UML
- Functional Size Measurement
- Cloud Computing
- COBIT Framework

# **OTHER ACADEMIC ACTIVITIES & SERVICES**

# **Membership in Graduate Student Thesis Committees**

Student name	Committee	Thesis title	Institution
	type		
		A method and tool support	
		for integrated business	
		process modeling and	Middle East Technical
Ahmet Coskuncay	PhD Final	ontology development	University
		A mathematical model for	
		planning and optimization	
Güzin Tirkeş	PhD Final	in food industry	Atılım University
		The influence of	
		modularity representation	
		and presentation medium	
		on the understandability	
		of business process	Middle East Technical
Ahmet Dikici	PhD Final	models	University
		Gov-pcdm: government	
		process capability	Middle East Technical
Ebru Gokalp	PhD Final	determination model	University
		Development of an	
		adaptive link generation	
		module for lms using	
İdil Kılıç	MSc Final	cloud environment	Atılım University
		A quality model for cloud-	
		based enterprise	Middle East Technical
Umut Seren	MSc Final	information systems	University
		Robust watermarking	
		using semi blind	
	PhD Candidacy Oral and	techniques for digital	
Omer Subhi Siddik	Written Exam	images	Atılım University
		Agent oriented software	
Reem Abdalla	PhD Thesis Monitoring	engineering methodology	Atılım University
		Factors influencing the	
		adoption of agile methods	
		in software development	
Smia Abdalhamid	PhD Thesis Monitoring	SMEs	Atılım University

# **Conference Organizations**

• National Software Engineering Symposium UYMS 2017 (Organizing co-chair)

- XP2015, Italy, Program Committee Member(PC)
- SEAA2015, Portugal, PC
- SEAA,2014, PC
- IWSM/MENSURA 2013, Turkey, Publicity Chair, Special Session Track Chair, PC.
- ICSEA2013, Italy, PC
- SEAA&DSD 2012-EuroMicro, Turkey, Organization Team Member.

# **Memberships**

- ISACA, Information Systems Audit and Control Association (Ankara Chapter Founding member)
- ACM, Association for Computing Machinery

# **Journal reviews**

- Journal of Systems and Software (Ad-hoc reviewer)
- Software Quality Journal (Ad-hoc reviewer)
- Information and Software Technology (Ad-hoc reviewer)

# **Guideline Development**

• Guideline for Sizing Service-Oriented Architecture Software, v1.1, COSMICON, 2015 Author/Reviewer.

# **PROFESSIONAL CERTIFICATES**

- Accredited COBIT 5 Trainer (ISACA, 2013).
- Certified Information Systems Auditor (CISA), (ISACA, 2010).
- Certified Software Functional Size Measurer, (COSMICON, 2009).