
Dr. Bülent GÜMÜŞ has worked in prestigious firms and universities as Assistant Professor, Program Manager, Project Manager, Consultant and Engineer in Turkey, USA and Qatar. He has more than 22 years of experience in private sector and academia in fields such as new product and system design, engineering and technology management, project management and strategic planning. He is currently teaching at Bilkent and TED Universities and working as the General Manager of innoCentrum.

- AREAS OF EXPERTISE AND RESEARCH**
- New Product/System Design and Development
 - Engineering and Technology Management
 - Innovation/R&D Management
 - Project Management
 - Strategic Planning and Management
 - Work Systems Analysis and Design
 - Systems and Requirement Engineering
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WORK EXPERIENCE

General Manager and Co-Founder, innoCentrum Systematic Innovation Management, Ankara, Turkey (Apr 2014 -)

Responsibilities:

- Providing training and consultancy services in the areas of expertise listed above.
 - Business development and marketing
 - Leading and directing employees
 - Designing and developing systematic innovation management software and training material.
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Adjunct Assistant Professor, Dept. of Industrial Engineering, Bilkent University, Ankara, Turkey (Feb 2019 -)

Courses offered: Engineering Economy

Adjunct Assistant Professor, Dept. of Industrial Engineering, TED University, Ankara, Turkey (Feb 2019 -)

Courses offered: Product Planning and Management

Adjunct Assistant Professor, Dept. of Industrial Engineering, TOBB University of Economics and Technology, Ankara, Turkey (Jan 2015 – May 2016)

Courses offered: Project Management, Work System Analysis and Design

Lecturer, TOBB ETÜ SEM, Ankara, Turkey (2008 - 2018)

Responsibilities: Offering short courses (3 hours to several days) in the subjects of Systematic Product Design and Development, Project Management, and Innovation and R&D Management

Program Manager and Business Developer, BAE Systems Inc., Ankara, Turkey and San Antonio, Texas (Nov 2011 – Apr 2014)

Responsibilities:

- Managed hardware and software development projects for the Turkish Air Force
 - Business development in Turkey and Egypt
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WORK EXPERIENCE (Continued...)

Assistant Professor, Dept. of Industrial Engineering, TOBB University of Economics and Technology, Ankara, Turkey (Mar 2007 – Mar 2012)

Courses offered:

- **Graduate:** Systematic Design, Design and Innovation
- **Undergraduate:** Engineering Economy, Project Management, Work Analysis and Design, Introduction to Engineering

Projects and Consultancy:

- Researcher, Performance Based Budget Control of Ministry of National Education, TÜBİTAK KAMAG Project
- New Product Design and Project Management Consultancy, Polar Technologies, Ankara (Nov 2009 – August 2010)

Administrative Duties and Responsibilities:

- Asst. Director of Graduate School of Natural and Applied Sciences (Nov 2009 – Mar 2012)
- Erasmus Department Coordinator (June 2007 – Nov 2009)
- Member of the TOBB ETÜ Career Guidance Commission (2007 - 2008)
- Member of the Expanded Faculty of Engineering Strategic Planning Committee (May 2007)

Visiting Assistant Professor, Dept. of Mechanical and Industrial Engineering, Qatar University, Doha, Qatar (Sep 2010 – Jul 2011)

Courses offered:

- **Graduate:** Business Fundamentals for Engineering Managers, Decision Techniques and Data Analysis
- **Undergraduate:** Design of Experiments, Engineering Management, Concurrent Engineering, Engineering Economics

Visiting Lecturer, Texas Tech University, Lubbock, Texas

Courses Offered:

- Transdisciplinary System Development Lifecycle and Management, Raytheon Transdisciplinary Graduate Programs (July 2013, June 2009, August 2007, April 2007)

Project Manager, Milsoft, Ankara, Turkey (Apr 2006 – Nov 2006)

Responsibilities: Managing a R&D Project team to develop a generic maintenance and health management system for complex platforms such as airplanes, helicopters and ships as well as preparing related proposals.

Program Manager, MTC Technologies, Inc., San Antonio, Texas (Apr 2005 – Mar 2006)

Projects:

- C-5 Aircraft Systems and Subsystems. Engineering services program with various tasks, such as, developing Anti-Skid Tester, parts re-engineering, to help identify and resolve technical and support deficiencies in order to reduce system and subsystem lifecycle cost. The customer was the US Air Force.
- Common Aircraft Signal Test Simulation. The system simulates the signals acquired from the test point sensors to help test onboard malfunction detection, analysis, and recording system for C-5 cargo airplanes. The customer was the US Air Force.

Responsibilities:

- Managing teams of mechanical, electrical, and software engineers and also support personnel.
- Program planning including budget, scheduling, effort and cost estimation, resource planning, and Earned Value Management analysis.
- Managing project and technical risks and preparing performance/status reports.
- Developing and implementing CMMi L2 and L3 processes and practices.

WORK EXPERIENCE (Continued...)

Project Leader/Senior Software Engineer, OnBoard Software, Inc., San Antonio, Texas (Jun 2001 – Apr 2005)

Project: Ground Processing Interface System. The application reads/processes/transfers flight data as well as to create flight reports for C-5 cargo airplanes. The customer was the US Air Force.

Responsibilities:

- Managing a team of six software engineers and support personnel.
- Project planning including scheduling, effort and cost estimation, resource planning, and Earned Value Management analysis
- Developing and implementing CMM L2 and L3 processes and practices as the pilot project.
- Implementing IBM Rational Unified Process methodology
- Performing QA activities, including developing and presenting monthly metric reports, and developing QA documentation and processes as the QA Specialist for two years.

Requirement Management Expert, OnBoard Software, Inc., San Antonio, Texas (Jun 2003 – Dec 2003)

Project: In-house requirement management application. The application is developed to capture, manage and trace the customer needs and requirements throughout the lifecycle of the system.

Responsibilities: Responsible for design and development of the application's business rules and the database.

Project Leader, OnBoard Software, Inc., San Antonio, Texas (Jan 1999 – May 2001)

Projects: Online Aircraft Maintenance Database Viewer and Online Flight Maintenance Data Reporting Application. The sponsor was the US Air Force.

Responsibilities:

- Managing a team of software engineers and support personnel.
- Project planning including scheduling, effort and cost estimation, and resource planning.
- Managing project and technical risks and preparing performance/status reports

Software Engineer, OnBoard Software, Inc., San Antonio, Texas (Jan 1998 – Dec 1998)

Project: Online Aircraft Maintenance Database Viewer. The application is used by the C5 airplane maintainers and flight crews to display the operational flight programs. Acted as the Project Leader for two months. The sponsor was the US Air Force.

Responsibilities:

- Design, development and administration of an Oracle Enterprise database
- Design and development of the web front-end.

Research Assistant, Dept. of Mechanical Engineering, TTU, Lubbock, TX (Jul 1996 – Dec 1997)

Responsibilities:

- Design and Construction of an Automated Peanut Drying Facility for the local peanut industry.
 - Experimental and numerical analysis of a 2 DOF Dynamical System, a vibration absorber.
 - Design and maintenance of the Society for Design and Process Science's web site.
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EDUCATION

PhD in Mechanical Engineering, (Dec 2005)

Texas Tech University, Lubbock, Texas

Dissertation title: Axiomatic Product Development Lifecycle

MS in Engineering Management (Completed 21 credit hours between Jan 1999-May 2001),

Southern Methodist University, Dallas, Texas

MS in Mechanical Engineering, Minor in Industrial Engineering (Dec 1997)

Texas Tech University, Lubbock, Texas

Emphasis of study: Design and Dynamics

BS in Mechanical Engineering (July 1996),

Middle East Technical University, Ankara, Turkey

MEMBERSHIPS

- Society for Design and Process Science (SDPS), 1998 - 2009.
- Ankara Project Management Association, 2007 - 2011
- San Antonio Oracle User Group (SAOUG), 1998 - 2005. Board member 2001 – 2003.
- American Society for Quality (ASQ), 2001 – 2002.
- San Antonio Software Process Improvement Network (SASPIN), 2003 – 2006.
- Turkish American Association of San Antonio, 2000 - 2006. Board member 2001 – 2002.

PUBLICATIONS

Journal Papers:

- A. Çubukcu and **B. GÜMÜŞ**, “Systematic Design of an Open Innovation Tool,” *Procedia - Social and Behavioral Sciences* 195 (2015) 2859 – 2867, DOI: 10.1016/j.sbspro.2015.06.407
- B. GÜMÜŞ**, A. ERTAŞ, D. TATE, and İ. ÇİÇEK, “Transdisciplinary Product Development Lifecycle”, *Journal of Engineering Design*, 19(03), pp. 185 – 200, June 2008. DOI: 10.1080/09544820701232436.
- B. GÜMÜŞ** and A. ERTAŞ, “Requirements Management and Axiomatic Design”, *Journal of Integrated Design and Process Science*, Vol. 8 Number 4, pp. 19-31, Dec 2004.

PUBLICATIONS (Continued...)

Proceeding Papers (also presented):

- A. Çubukcu and **B. GÜMÜŞ**, “Systematic Design of an Open Innovation Tool,” *World Conference on Technology, Innovation and Entrepreneurship*, İstanbul, May 28-30, 2015
- B. GÜMÜŞ** and A. Çubukcu, “Open Innovation Survey in Top Turkish Companies,” *Proceedings of PICMET 2011*, Portland, OR, August 2011
- A. ÇUBUKCU and **B. GÜMÜŞ**, “A Comparative Study of Open Innovation Web Portals,” *ISPIM 2010*, Bilbao, Spain, June 2010
- B. GÜMÜŞ** and V. DEMİR, “A Model for Systematic Strategic Planning and Management,” *The ATLAS T3 Annual Meeting Proceedings*, Georgetown, Texas, June 2010
- B. GÜMÜŞ** and D. GÜNDOĞDU, “Project Management in Turkish Construction Industry,” *Dynamics’2010*, İstanbul, April 2010
- B. GÜMÜŞ**, V. DEMİR, and Ü. KAYNAK, “Technology Management in Turkish Defense Industry,” *PICMET*, Portland, August 2009
- S. GATCHEL, A. YILDIRIM, **B. GÜMÜŞ**, F. GÜNGÖR, and A. Ertas, “Neutral Density Filter Controller Design Using Transdisciplinary System Development Lifecycle Model,” *Integrated Design and Process Technology Conference*, Taiwan, June 2008
- B. GÜMÜŞ** and Ü. Kaynak, “Human Resource Education for Defense Industry”, *2nd Project Management Symposium, SMEs in Defense Industry*, Ankara, 8 December 2007
- B. GÜMÜŞ**, A. ERTAŞ, and D. TATE, “Transdisciplinary Product Development Lifecycle Framework And Its Application To An Avionics System”, *Integrated Design and Process Technology Conference*, San Diego, CA, June 2006.

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- B. GÜMÜŞ** and A. ERTAŞ, "Requirements Management and Axiomatic Design", Integrated Design and Process Technology Symposium, Izmir, Turkey, June 2004.
- A. ERTAŞ, **B. GÜMÜŞ**, and B. UNUVAR, "A Framework of knowledge-based design process: Transdisciplinary approach", Integrated Design and Process Technology Conference, June 2002.
- B. GÜMÜŞ**, A. ERTAŞ, B. UNUVAR, and M. DOĞANLI, "Requirements Traceability (RT) throughout the system development lifecycle using Axiomatic Design (AD) approach", Integrated Design and Process Technology Conference, Pasadena, CA, June 2002.
- O. ÇUVALCI, **B. GÜMÜŞ**, and A. ERTAŞ, "An Experimental Investigation of Non-Linear System in Autoparametric Region", IDPT-Vol. 3, Austin, TX, December 1996.

TRAINING & CERTIFICATES

Project Management:

- Project Management by *The George Washington University*, May 6-9, 2002
- Software Quality Engineering by *American Society for Quality*, Nov 5-9, 2001
- 7 Habits of Highly Effective People, by *Ron Ford, CEO, OBSI*, Nov 17-19, 2001
- CMM Training Seminars by *MPSi*, Apr 2001
- Custom MS Project 98 by *New Horizons Computer Learning Center*, Feb 24, 2000
- MS Project 98 for Windows 95/NT 4.0 by *Productivity Point International*, Aug 9-10, 1999
- Successful Project Management Skills by *SkillPath Seminars*, Apr 3, 1998

Programming and Application Development:

- Oracle Forms Developer: Build Internet Applications I by *Oracle*, Mar 19-23, 2001
 - Introduction to Java Programming by *Westlake Internet Training*, May 1-4, 2000
 - Develop PL/SQL Program Units by *Oracle*, Aug 23-25, 1999
 - PERL CGI Scripting and Database Integration by *Westlake Internet Training*, Apr 5-9, 1999
 - Designer/2000 First Class: Analysis, Design and Generation by *Oracle*, Jun 15-19, 1998
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