

# A. Burak Paç

## Curriculum Vitae

Department of Industrial Engineering  
Gebze Technical University  
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### Work Experience

- Mar 2018 – Present **Assistant Professor, Industrial Engineering**, *Gebze Technical University*, Kocaeli
- Oct 2013 – Feb 2017 **Software Programmer/Numerical Optimization**, *Hemosoft Information Technologies and Training Services, Inc.*, Ankara
- Aug – Sep 2007 **SAP Consultancy Intern**, *VEKTORA IT Consulting Company*, Istanbul
- Sep 2005 **Intern**, *CNG Bus Project Management*, MAN Turkey Inc. Ankara Bus & Truck Plant, Ankara
- Aug 2004 **Intern**, *ASELSAN Electronic Industries Inc.*, *Engineering Directorate Department*, Ankara

### Educational Background

- 2010-2016 **Doctor of Philosophy**, *Department of Industrial Engineering, Bilkent University*, Ankara, Turkey  
Thesis title: Robust Portfolio Optimization with Risk Measures under Distributional Uncertainty
- 2007-2010 **Master of Science**, *Department of Industrial Engineering, Bilkent University*, Ankara, Turkey  
Thesis title: Row Generation Techniques for Approximate Solution of Linear Programming Problems
- 2006-2007 **PhD Program**, *Graduate School of Business, Department of Operations, Information and Technology*, Stanford University, Stanford, California, USA
- 2002-2006 **Bachelor of Science**, *Department of Industrial Engineering, Bilkent University*, Ankara, Turkey, Graduated as First of the Cohort

### Teaching Experience

- 2007 – 2014 **Teaching Assistant**, *Department of Industrial Engineering, Bilkent University*, Ankara, Turkey  
IE202: Introduction to Modeling and Optimization  
IE303: Modeling and Methods in Optimization  
IE325: Stochastic Models  
IE342: Engineering Economic Analysis  
IE490: Introduction to Research in IE/OR

20018 – **Assistant Professor**, *Department of Industrial Engineering, Gebze Technical University, Kocaeli, Turkey*

IE511: Linear Programming

IE514: Mathematical Foundations of Operations Research

IE201: Introduction to Optimization

IE201: Introduction to Optimization

IE203: Economics I

IE204: Economics II

INF212: Algorithms and Programming II

IE434: Design for Human Factors

INF100: Introduction to Computer Systems

ECON207: Statistics I

ECON208: Statistics II

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## Research Interests

Theoretical Robust Optimization, Convex Optimization, Stochastic Modeling, Stochastic Programming, Statistics, Linear Programming, Nonlinear Programming

Applied Game Theory, Finance, Numerical Optimization, Bioinformatics  
IE/OR

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## Publications

- [1] Paç, A.B. and Pınar, M.Ç. "On Robust Portfolio and Naive Diversification: Mixing Ambiguous and Unambiguous Assets", to appear in *Annals of Operations Research*.
- [2] Pınar, M.Ç. and Paç, A.B. "Mean Semi-deviation from a Target and Robust Portfolio Choice under Distribution and Mean Return Ambiguity." *Journal of Computational and Applied Mathematics* 259 (2014): 394-405.
- [3] Paç, A.B. and Pınar, M.Ç. "Robust Portfolio Choice with CVaR and VaR under Distribution and Mean Return Ambiguity." *TOP 22* (2014): 875-891.
- [4] Pınar, M.Ç. and Paç, A.B. "Expected Downside Deviation and Robust Portfolio Choice under Distribution and Mean Return Ambiguity." (working paper).

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## Conference Presentations

**"Investor Avoidance from Risk as the Uniform Portfolio Becomes Optimal"**  
November 2015, INFORMS Annual Meeting, Philadelphia, PA, USA.

**"Mean Semi-Deviation from a Target and Robust Portfolio Choice under Distribution and Mean Return Ambiguity"**

September 2015, YAEM, Middle East Technical University, Ankara, Turkey (in Turkish).

**"Dairy Farm Ration Optimization in Terms of Milk Yield and Cost"**

September 2015, YAEM, Middle East Technical University, Ankara, Turkey (in Turkish).

## Research Projects

- Nov 2021 – **PV40+ Photovoltaic Panels with Service Life Beyond 40 Years and Reduced Environmental Impact**, supported by TUBİTAK ARDEB UPAG
- Jan 2023 – **ASYST Farm and Herd Management Decision Support System**, supported by TUBİTAK TEYDEB Industrial R&D Grant 1501

## Industrial Projects

- Dec 2013 – **Genesense Genetic Diagnosis and Research Software System**, supported by TUBİTAK TEYDEB Industrial R&D Grant 1501
- Nov 2016
- Feb 2012 – **ASYST Farm and Herd Management Decision Support System**, supported by TUBİTAK TEYDEB Industrial R&D Grant 1501
- Nov 2014

## Honors and Awards

- 2012 **2211 Doctoral Scholarship**, from TUBİTAK
- 2010 **Full scholarship**, from Bilkent University for PhD studies
- 2007 **Full scholarship**, from Bilkent University for MS studies
- 2006 **Fellowship**, from Stanford University Graduate School of Business for PhD studies
- 2002 **Full scholarship**, from Bilkent University for BS studies

## Computer skills

- Programming C, C++, Python, JAVA, Fortran 77/95, MATLAB/GNU Octave, R Programming
- Optimization Gurobi, ILOG CPLEX/Concert Technology, Xpress
- General L<sup>A</sup>T<sub>E</sub>X