## Murat M. Tunc

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Education

## University of Texas at Dallas - Jindal School of Management

Ph.D. in Management Science (Major: Information Systems)

2015-2020 (Expected)

• Committee Chairs: Srinivasan Raghunathan, Hüseyin Çavuşoğlu

Sabancı University, Istanbul, Turkey

M.Sc. in Industrial Engineering

2013-2015

• Thesis: Diffusion of Innovation and Collective Action in Complex Networks

B.S. in Manufacturing Systems and Industrial Engineering

2008-2013

Research Interests **Topics:** Online Platform's Information Strategy, Information Asymmetry in Peer-to-Peer Markets, Reward Mechanisms in Blockchain Projects

Methods: Game Theory, Econometrics, Machine Learning, Field Experiments

Applications: Online Marketplaces, Sharing Economy, Blockchain, Smart Contracts

Journal Publications

- 1. Online Product Reviews: Is a Finer-Grained Rating Scheme Superior to a Coarser One? Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan MIS Quarterly, Conditionally Accepted
- 2. New Knowledge in Strategic Management through Visually Mining Semantic Networks Gürdal Ertek, Gül Tokdemir, Mete Sevinç, Murat M. Tunç Information Systems Frontiers, 19(1), 165-185. 2017

Under Review 3. Two-sided Adverse Selection and Bilateral Reviews in Sharing Economy Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan Management Science, *Under Review* 

Working Papers

4. Secrets to Survival of Blockchain Projects
Murat M. Tunç, Zhiqiang (Eric) Zheng, Hasan Çavuşoğlu
Working Paper. Extended abstract available by request

Work-in Progress 5. Assessing the Impact of Personalized Messages in Product Recommendations: Evidence from a Randomized Field Experiment

Murat M. Tunç, Hasan Çavuşoğlu, Hüseyin Çavuşoğlu, Srinivasan Raghunathan Current stage: Experiment Design

6. What's in Your Wallet? Impact of Earning Visibility on Future Payoffs and Free-Giving Behavior in Continuous Crowdfunding

Murat M. Tunc

Current stage: Data Analysis

7. Burn-out Effect in Multi-sided Platforms: Evidence from Music Industry Murat M. Tunç

Current stage: Data Analysis

## Conference Presentations & Proceedings

1. Two-sided Adverse Selection and Bilateral Reviews in Sharing Economy

Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan Proceedings of the 40th International Conference on Information Systems (ICIS), December 15-18, Munich, Germany, 2019

2. Two-sided Adverse Selection and Bilateral Reviews in Sharing Economy

Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan INFORMS Annual Meeting, Seattle, WA, October 20-23, 2019

3. Double-sided Adverse Selection and Bilateral Reviews in Sharing Economy

Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan INFORMS 10th Annual Conference on Information Systems & Technology (CIST), Phoenix, AZ, November 3-4, 2018

4. Double-sided Adverse Selection and Bilateral Reviews in Sharing Economy

Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan 29th Workshop on Information Systems and Economics (WISE), San Francisco, CA, December 17–18, 2018

5. Single-dimensional versus Multi-dimensional Product Ratings in Online Marketplaces Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan *Platform Strategy Research Symposium*, Boston, MA, July 18, 2018

6. Single-dimensional versus Multi-dimensional Product Ratings in Online Marketplaces for Experience Goods

Murat M. Tunç, Hüseyin Çavuşoğlu, Srinivasan Raghunathan Proceedings of the 38th International Conference on Information Systems (ICIS), Seoul, South Korea. December 10-13, 2017

- 8. Data Mining of Project Management Data: An Analysis of Applied Research Studies Gürdal Ertek, Murat M. Tunç, Allan N. Zhang, Ömer Tanrıkulu, Sobhan Asian Proceedings of the ACM International Conference on Information Technology, pp. 35-41, Singapore, December 27-29, 2017
- 9. Encapsulation and Representing the Knowledge on the Evolution of an Engineering System Gürdal Ertek, Ahmetcan Erdoğan, Volkan Patoğlu, Murat M. Tunç, Ceysu Çitak, Tuğçe Vanlı Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, IDETC/CIE, Chicago, IL, Aug 12-15, 2012
- 10. Insights into the Efficiencies of On-shore Wind Turbines: A Data-centric Analysis Gürdal Ertek, Murat M. Tunç, Ece Kurtaraner, Doğancan Kebude International Symposium on IEEE Innovations in Intelligent Systems and Applications (IN-

ISTA), pp. 1-7, Trabzon, Turkey, July 2-4, 2012
1. Re-Mining Association Mining Results through Visualization, Data Envelopment Analysis and

Gürdal Ertek, Murat M. Tunç

Decision Trees

Computational Intelligence Applications in Industrial Engineering, Ed: C. Kahraman, pp. 605-626, Springer, 2012

## Teaching

Book

Chapters

#### University of Texas at Dallas

1. Introduction to Programming

Undergraduate course. Fundamental concepts of object-oriented programming in Java Course Instructor. Spring 2019. Enrollment - 55. Evaluation - 4.92 / 5.00.

2. Introduction to Programming

Course Instructor. Fall 2019. Enrollment - 57

<sup>&</sup>lt;sup>1</sup>Note: Evaluation is based on the question "Overall, this instructor was excellent".

## Teaching

#### Sabanci University

3. Simulation

Undergraduate course. Principles of modeling, simulation, and analysis for discrete event systems using software package Arena

Recitation Instructor. Spring 2015

4. Production and Service Systems Operations

Undergraduate course. Mathematical and computer methods for planning and control in production and distribution systems

Recitation Instructor. Fall 2013. Fall 2014

5. Quality Planning & Control

Undergraduate course. Introduction to total quality management philosophies, design and analysis of statistical process control systems

Recitation Instructor. Fall 2012

Skills

**Programming:** Python, R, Stata, SAS, SQL, C++, Java, MATLAB, Mathematica, CPLEX, Arena, NetLogo, Minitab, Weka, HTML, LATEX

Data Science: Pandas, NumPy, Selenium, Matplotlib, Plotly

Technical: Data Scraping, Cleaning, Wrangling, Mining and Visualization, Machine Learning

## Industry Collaborations

#### Perzonalization

2018 - Present

Istanbul, Turkey

- Company profile: Personalized eCommerce product recommendations on web, mobile, and emails
- Designing a randomized field experiment for personalized messages in product recommendations

## Ad-hoc Reviewer

International Conference on Information Systems (ICIS), 2018, 2019

INFORMS Conference on Information Systems & Technology (CIST), 2019

## Visiting Positions

## Research Scientist

June - Sep 2012

Singapore Institute of Manufacturing Technology, Singapore

Planning and Operations Management

- Project: Analyzing the Relationship Between Supply Chain Risk and Company Sales
- Advisor: Allan N. Zhang

## Research Scientist

June - Sep 2011

Eindhoven University of Technology, Netherlands

Department of Industrial Engineering and Innovation Sciences

- Project: Modeling Multimodal Freight Transportation Networks
- Advisor: Tom van Woensel

## Awards & Grants

#### Fellowships & Scholarships

- The University of Texas at Dallas, Jindal School of Management PhD Fellowship, 2017
- The University of Texas at Dallas, Jindal School of Management PhD Scholarship, (Full tuition fee waiver + Stipend for 5 years), 2015
- TÜBİTAK (Scientific and Technological Research Council of Turkey) Graduate Fellowship (Stipend for 2 years), 2013
- Sabancı University Graduate Scholarship (Full tuition fee waiver + Stipend for 2 years), 2013
- Sabancı University Honor Scholarship (Full tuition fee waiver + Stipend for 5 years), 2008

## Research Internship Awards

- Singapore International Pre-Graduate Award, by Singapore Agency for Science, Technology and Research (Stipend for 3 months + Airfare allowance), 2012
- Erasmus Internship Mobility Grant (Stipend for 3 months), 2011

#### Teaching Awards

 Sabancı University Faculty of Engineering and Natural Sciences Best Teaching Assistant Award, 2014

# Awards & Grants

## Case Competitions

• Winner of Nielsen Business Case Competition, 2013

## Nationwide Exam Rankings

- Ranked 43rd among ~300,000 candidates in the Turkish Graduate Record Exam (ALES), 2013
- Ranked in top 0.1 percentile among ~1.5 million candidates in the Turkish University Entrance Exam (ÖSS), 2008

## Selected Coursework

## University of Texas at Dallas

Research Seminars

- Game Theory (PhD)
- Optimization & Mechanism Design (PhD)
- Empirical Methods (PhD)
- Knowledge Management (PhD)

#### Econometrics

- Applied Econometrics (PhD)
- Econometrics II (PhD)
- Special Topics in Econometrics (PhD)

## Sabancı University

Operations Research

- Stochastic Processes (MS)
- Linear Programming & Extentions (MS)
- Nonlinear Programming (MS)
- Operations Mgmt. & Decision Models (MS)

#### Networks

- Graph Theory & Network Flows (MS)
- Analysis of Social Networks (MS)

## Teaching Assistantship

## University of Texas at Dallas

- Network and Information Security, Fall 15
- Information Technology for Business, Fall 15, Spring 16, Summer 16
- Systems Analysis and Design (MS), Summer 16
- Healthcare Informatics (MS), Fall 18
- Object Oriented Programming, Summer 19

## Economics / Analytical Modeling

- Advanced Managerial Economics (PhD)
- Game Theory (PhD)
- Mechanism Design (PhD)
- Industrial Organization (PhD)

## Operations Research

- Optimization (PhD)
- Advanced Statistics and Probability (PhD)
- Probability & Stochastic Processes (PhD)

## Finance / Economics

- Financial Engineering
- Stochastic Models in Finance (MS)
- Investment Decision Making
- Game Theory

## Data Analytics

- Data Analysis and Research in Business
- Data Visualization & Analysis

#### • Cloud Computing (MS), Spring 16

- Database Foundations (MS), Fall 16, Spring 17, Summer 19
- Information Tech. Security (MS), Spring 17
- Healthcare Analytics (MS), Fall 18
- Data Management (MS), Summer 19

#### Personal

Language: Fluent in English and Turkish

Interests: Playing Guitar, Basketball, Photography, Cooking, Cycling, Traveling

## References

#### Srinivasan Raghunathan

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## Zhiqiang (Eric) Zheng

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#### Hüseyin Çavuşoğlu

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## Hasan Çavuşoğlu