# Tayfun Keskin

## CONTACT INFORMATION

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## EDUCATION

**Ph.D.,** The University of Texas at Austin, McCombs School of Business...............................................2010
*Information, Risk, and Operations Management Department.*
*Advisor: Sirkka L. Jarvenpaa, Co-advisor: Alina M. Chircu*
*Concentration: Information Systems, Minor: Statistics.*
**M.Sc.,** The University of Texas at Austin, McCombs School of Business...............................................2009
*Management Information Systems.*
**MBA,** Sabancı University.................................................................................................................2004
*Awarded by a fellowship, which is given to only one student each year throughout the university.*
**B.Sc.,** Boğaziçi University, Electrical and Electronics Engineering.......................................................2001
*Awarded by various scholarships based on success at the university entrance exam (190$^{th}$ among*
*1.3 million participants). Graduated with honors.*

## ACADEMIC EMPLOYMENT

**University of Washington, Seattle**, Michael G. Foster School of Business ...............................2020-present
*Associate Teaching Professor of Information Systems and Operations Management.*
**The University of Texas Rio Grande Valley**, Robert C. Vackar College of Business................... 2017-2020
*Assistant Professor of Information Systems.*
**University of Washington, Bothell**, School of Business.................................................................. 2010-2017
*Assistant Professor of Management Information Systems.*
**The University of Texas at Austin**, McCombs School of Business............................................... 2004-2010
*Assistant Instructor (Previously Teaching and Research Assistant).*
**Sabancı University**, Graduate School of Management ................................................................... 2002-2004
*Research and Teaching Assistant.*

## INDUSTRY EXPERIENCE

**Kraft Foods Group Inc.,** Istanbul, Turkey ......................................................................................2004
*Marketing - Data Analyst.*
**Oracle Corp.,** Istanbul, Turkey ....................................................................................... 2003-2004
*Project Manager.*
**Procter & Gamble Co.,** Istanbul, Turkey ................................................................................ 2001-2002
*Process Engineer.*

## INTERESTS

Information goods pricing, internet of things, data analytics, cloud computing, cybersecurity, blockchains, gamification, behavioral modeling and simulation, collaborative information technologies, enterprise systems strategies, strategic alignment, transactive memory systems, electronic commerce, IT economics.

## RESEARCH

**Publications:**

1. **Keskin, T.,** & Demirkan, H. (2016). Making Wise Decisions with the Internet-of-Things. *INFORMS Analytics*, May/June 2016, 48-56.
2. **Keskin, T.,** Tanrisever, F., & Demirkan, H. (2016). Sustainable Business Models for the Internet-of-Things: Are companies ready for billions of everyday objects to join the Internet? *ORMS Today*, *43*(1), 36-39.
3. **Keskin, T.,** & Taskin, N. (2015). Strategic Pricing of Horizontally Differentiated Services with Switching Costs: A Pricing Model for Cloud Computing. *International Journal of Electronic Commerce*, *19*(3), 34-53.
4. Pardoe, D., Stone, P., Saar-Tsechansky, M., **Keskin, T.,** & Tomak, K. (2010). Adaptive Auction Mechanism Design and the Incorporation of Prior Knowledge. *INFORMS Journal on Computing*, *22*(3), 353-370.
5. Tomak, K., & **Keskin, T.** (2008). Exploring the Trade-Off between Immediate Gratification and Delayed Network Externalities in the Consumption of Information Goods. *European Journal of Operational Research, 187*(3), 887-902.

**Book Chapter:**

6. Shen, Y., Yang, J., & **Keskin, T.** (2014). Impact of Cultural Differences on the Cloud Computing Ecosystems in the USA and China. In Y. Shen, Y. Li, L. Wu, S. Liu, & Q. Wen (Eds.) *Enabling the New Era of Cloud Computing: Data Security, Transfer, and Management* (pp. 269-283). Hershey, PA: Information Science Reference. doi:10.4018/978-1-4666-4801-2.ch014

**Manuscripts Under Review:**

7. **Keskin, T.** & Demirkan, H. Mitigating the Reduction in Team Performance: Retention of Transactive Memory. *Journal of the Association for Information Systems.*
8. Tanrisever, F., **Keskin, T.,** & Wismans-Voorbraak, K-A. Crowdfunding for Financing Internet of Things Enabled Services. *International Journal of Electronic Commerce*.

**Working Paper:**

9. Ahluwalia, P, and **Keskin, T.,** Healthcare information systems services pricing in a pandemic ecosystem. *Working paper.*
10. **Keskin, T.,** & Ryan, C. Pricing of Games as a Service: An Analytical Model for Interactive Digital Services with Hedonistic Properties. *Earlier version presented at HICSS.*

**Work-in-Progress Projects:**

11. "The Rise of Internet of Things and Analytics in Sports" with H. Demirkan. Invited to *IT Professional.*
12. "Multiple Server Investment Decisions Based on Energy Cost Structure and Carbon Emission Rates" with F. Tanrisever. Target: *Decision Support Systems.*
13. "The Role of Information Technologies under Project Scope Change: Adaptive Simulation of a Learning Leader" with N.B. Keskin. Target: *INFORMS Journal on Computing.*

**Refereed Conference Proceedings:**

14. **Keskin, T.,** Tan, B. (2019). Digital Transformation Through Internet of Things Services. *Proceedings of the 52nd Annual Hawaii International Conference on System Sciences (HICSS),* Wailea, HI.
15. **Keskin, T.** (2018). Pricing of Games as a Service: An Analytical Model for Interactive Digital Services with Hedonistic Properties. *Proceedings of the 51st Annual Hawaii International Conference on System Sciences (HICSS),* Wailea, HI.
16. Kennedy, D., & **Keskin, T.** (2016). A Pricing Model for the Internet of Things Enabled Smart Service Systems. *Proceedings of the 49th Annual Hawaii International Conference on System Sciences (HICSS),* Koloa, HI, pp. 1782-1789. doi: 10.1109/HICSS.2016.225

17. **Keskin, T.,** & Kennedy, D. (2015). Strategies in Smart Service Systems Enabled Multi-sided Markets: Business Models for the Internet of Things. *Proceedings of the 48th Annual Hawaii International Conference on System Sciences (HICSS),* Kauai, HI, pp. 1443-1452. doi: 10.1109/HICSS.2015.176

18. Taskin, N., Intezari, A., Verville, J., & **Keskin, T.** (2014). Interdisciplinary Collaboration in Healthcare Systems: An Empirical Study. *Proceedings of the Australasian Conference of Information Systems (ACIS)*, Auckland, New Zealand.

19. Taskin, N., Intezari, A., Verville, J., & **Keskin, T.** (2014). Quality of Output in Healthcare: An Empirical Study. *Proceedings of the Australia & New Zealand Academy of Management (ANZAM) Conference*, Sydney, Australia.

20. **Keskin, T.,** & Taskin, N. (2014). A Pricing Model for Cloud Computing Service. *Proceedings of the 47th Annual Hawaii International Conference on System Sciences (HICSS),* Waikoloa, HI, pp. 699-707. doi: 10.1109/HICSS.2014.94

21. Taskin, N., Verville, J., & **Keskin, T.** (2014). Strategic Alignment of Enterprise Systems and Business Strategies under Systems and Bivariate Approaches. *Proceedings of the 47th Annual Hawaii International Conference on System Sciences (HICSS),* Waikoloa, HI, pp. 4034-4043. doi: 10.1109/HICSS.2014.499

22. **Keskin, T.,** & Taskin, N. (2013). Technology Role in Turbulent Teams: An Analytical Model and Empirical Validation. *Proceedings of the 46th Annual Hawaii International Conference on System Sciences (HICSS),* Wailea, HI, pp. 599-608. doi: 10.1109/HICSS.2013.509 *(**Nominee for the Best Paper Award**)*

23. Shen, Y., Yang, J., & **Keskin, T.** (2012). The Evolution of IT towards Cloud Computing in China and U.S. *Proceedings of the International Conference on Computational Problem-Solving (ICCP)*, Leshan, China, pp. 224-235. doi: 10.1109/ICCPS.2012.6384331

24. Shen, Y., **Keskin, T.**, & Yang, J. (2012). The Impact of Cultural Differences on Cloud Computing Ecosystems in U.S. and China. *Proceedings of the Americas Conference of Information Systems (AMCIS) 2012*, Seattle, WA. Paper 27.

25. **Keskin, T.** (2010). Transactive Memory Structures and Collaborative Information Technology in Turbulent Teams: An Experiment. *Proceedings of the Americas Conference of Information Systems (AMCIS) 2010,* Lima, Peru. Paper 42.

**Other Publications:**

26. Riggins, F., & **Keskin, T.** (2019). Introduction to the Minitrack on Internet of Things: Providing Services Using Smart Devices, Wearables, and Quantified Self. *Proceedings of the 52nd Annual Hawaii International Conference on System Sciences (HICSS)*, Wailea, HI.

27. **Keskin, T.** (2018). Introduction to the Internet of Things: Providing Services Using Smart Devices, Wearables, and Quantified Self Minitrack. *Proceedings of the 51st Annual Hawaii International Conference on System Sciences (HICSS)*, Wailea, HI.

28. Riggins, F., & **Keskin, T.** (2017). Introduction to the Internet of Things Minitrack. *Proceedings of the 50th Annual Hawaii International Conference on System Sciences (HICSS)*, Wailea, HI, pp. 1391.

29. **Keskin, T.,** Kennedy, D. & Paredes, H., (2016). Introduction to the Wearables and Quantified Self Minitrack. *Proceedings of the 49th Annual Hawaii International Conference on System Sciences (HICSS)*, Koloa, HI, pp. 1781-1781. doi: 10.1109/HICSS.2016.224

## PRESENTATIONS

**Invited Seminars:**
1. "The Role of Machine Learning for Internet-of-Things Ecosystems," HICSS workshop: AI in Network Infrastructure and Management Applications, Chairs: Ammar Rayes (Cisco) / Rich Plane (Cisco, CTO), Maui, HI, Jan 8, 2020
2. "Social Media Analytics," Sabancı University, Business School, Istanbul, Turkey, July 5, 2018
3. "Social Media Analytics," Bilkent University, Faculty of Business Administration, Ankara, Turkey, June 1, 2018
4. "Cybersecurity and the Internet of Things," Shippensburg University, John L. Grove College of Business, Shippensburg, PA, February 13, 2017
5. "Database Management Systems: Entity Relationship Modeling," University of Tampa, Sykes College of Business, Tampa, FL, January 31, 2017
6. "Business Models for the Internet of Things," University of British Columbia, Sauder School of Business, Vancouver, Canada, October 14, 2016
7. "Collaborative Information Technologies and Turbulent Teams," University of South Florida, Sarasota, FL, January 21, 2016
8. "Sustainable Business Models for the Internet-of-Things," University of San Francisco, San Francisco, CA, December 11, 2015
9. "Trusting the Internet of Things," Discovery Summit: Privacy and Security Implications of IoT, San Jose State University, Santa Clara, CA, November 11-12, 2015

**Conference Presentations:**
10. "Digital Transformation Through Internet of Things Services," 52nd HICSS, Wailea, HI, January 7, 2019
11. "Pricing of Games as a Service: An Analytical Model for Interactive Digital Services with Hedonistic Properties," 51st HICSS, Wailea, HI, January 4, 2018
12. "A Pricing Model for the Internet of Things Enabled Smart Service Systems," with D. Kennedy, 49th HICSS, Koloa, HI, January 8, 2016
13. "A Pricing Model for the IoT-Enabled Multi-Sided Markets with Cross-Market Externalities," UW Bothell School of Business Research Seminar Series, October 16th, 2015
14. "Strategies in Smart Service Systems Enabled Multi-Sided Markets: Business Models for the Internet of Things," 48th HICSS, Kauai, HI, January 6, 2015
15. "Interdisciplinary Collaboration in Healthcare Systems: An Empirical Study," 25th ACIS, Auckland, New Zealand, December 8-10, 2014
16. "Quality of Output in Healthcare: An Empirical Study," 28th ANZAM, Sydney, Australia, December 3-5, 2014
17. "A pricing model for cloud computing service," 47th HICSS, Kona, HI, January 6-9, 2014 (Invited to three journals including International Journal of Electronic Commerce)
18. "Strategic Alignment of Enterprise Systems and Business Strategies under Systems and Bivariate Approaches," 47th HICSS, Kona, HI, January 6-9, 2014
19. "A cloud computing pricing model," 35th ISMS Marketing Science Conference, Istanbul, Turkey, July 11-13, 2013
20. "Technology Role in Turbulent Teams: An Analytical Model and Empirical Validation," 46th HICSS, Maui, HI, January 7-10, 2013 (Best paper nomination)
21. "The Impact of Cultural Differences on Cloud Computing Ecosystems in U.S. and China," 18th AMCIS, Seattle, WA, August 9-12, 2012 (mini-track chair)
22. "Project Scope Change and Turbulent Teams," UW Bothell Research-in-Progress Series, Bothell, WA, November 1, 2011
23. "Behavioral model of project scope change," INFORMS Annual Meeting, Austin, TX, November 7-10, 2010 (session chair)

24. "You can Leave When the Systems are in Place: an analytical model of collaborative information technology moderation in dynamic teamwork with team member departure," UW Bothell Research-in-Progress Series, Bothell, WA, October 26th, 2010
25. "Transactive Memory Structures and Collaborative Information Technology Role in Turbulent Teams: An Experiment," 16th AMCIS, Lima, Peru, August 12-15, 2010
26. "An Analytical Model of Collaborative Information Technology Moderation," IFIP 9.1, Post-ICIS workshop: computers and work, 30th ICIS, Phoenix, AZ, December 15-18, 2009 (invited)
27. "Benefits of Revealing Market Structure: Illusion of Isolated Retailers," INFORMS Annual Meeting 2008, Washington, DC - October 10-15, 2008
28. "Collaborative Information Technology Moderation in Dynamic Teamwork with Team Member Departure," INFORMS Southwest Regional Conference, College Station, TX - April 18-19, 2008
29. "The Impact of Collaborative Technologies on Team Performance," The Academy of Management 2007 Annual Meeting Doctoral Consortium, Philadelphia, PA - August 3-8, 2007
30. "Collaboration after Team Member Departure: Role of Information Systems," Big XII MIS Research Symposium, Lawrence, KS – March 31-April 1, 2007
31. "Simulation for Seller Support in Online Auctions," DSI 2006 Conference, San Antonio, TX - November 18-21, 2006

## TEACHING

**Teaching Interests:**

Introduction to Information Technology, Business Process Management, Business Analytics, Social Media Analytics, Enterprise IT Strategy and Management, Databases, Data Mining, Text Mining, Cybersecurity, Project Management, Cloud Computing (AWS).

**Courses taught:**

1. **MSIS 512, Information Security** (UW Foster, MSIS) ..........................................................Autumn 2020
   Evaluation: N/A, Challenge and engagement index: N/A
2. **I S 300, Introduction to Information Systems** (UW Foster, Undergraduate) .....................Autumn 2020
   Evaluation: N/A, Challenge and engagement index: N/A
3. **BUS AN 511, Programming Essentials** (UW Foster, MSBA)......................................... Summer 2020
   Evaluation: N/A, Challenge and engagement index: N/A
4. **T CSL 580, Project Management** (UW Tacoma, MCL)...................................................... Summer 2020
   Evaluation: N/A, Challenge and engagement index: N/A
5. **TBANLT 530, Business Process and Workflow Analysis** (UW Tacoma, MSBA) .................2018-2020
   Evaluation: **4.8/5**, Challenge and engagement index[1]: 4.8 /7
6. **TBANLT 580, Social Media Analytics** (UW Tacoma, MSBA)......................................... Summer 2018
   Evaluation: **4.0/5**, Challenge and engagement index: 4.5 /7
7. **INFS 6363, Enterprise Analytics** (UTRGV).......................................................................... Spring 2020
   Evaluation: N/A due to COVID-19
8. **QUMT 2341, Business Statistics I** (UTRGV) ......................................................................2017-2020
   Evaluation: **4.95/5**, Percent Agree + Strongly Agree[2]: 100%
9. **QUMT 3343, Statistical Methods for Business** (UTRGV) .....................................................2018-2020
   Evaluation: **4.94/5**, Percent Agree + Strongly Agree: 100%
10. **INFS 3308, Business Information Infrastructure** (UTRGV) .................................................2017-2020
    Evaluation: **4.83/5**, Percent Agree + Strongly Agree: 100%
11. **INFS 2300, Data Modeling Management Tools** (UTRGV) ....................................................2017-2020
    Evaluation: **4.80/5**, Percent Agree + Strongly Agree: 96.7%
12. **BBUS 521, Enterprise IT Management** (UW Bothell, MBA Elective) ...................................2013-2017
    Evaluation: **4.9/5**, Challenge and engagement index: 6.6 /7
13. **BBUS 489, Digital Business Lab** (UW Bothell, MIS Capstone) .............................................2011-2017
    Evaluation: **4.9/5**, Challenge and engagement index: 5.8 /7
14. **BBUS 330, Information Management and Analysis** (UW Bothell, MIS Introduction) ..........2011-2017
    Evaluation: **4.6/5**, Challenge and engagement index: 5.6/7
15. **ELCBUS 330, Hybrid Inf. Management** (UW Bothell, 50% online content)..........................2011-2017
    Evaluation: **4.1/5**, Challenge and engagement index: 5.5/7
16. **MIS 301, Information Technology in Business** (UT Austin, MIS Introduction) .................. Spring 2007
    (Selected to teach the course based on a teach-off competition among Ph.D. students)
    Evaluation: **4.5/5** (*highest score for a Ph.D. student instructor*)

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[1] *Challenge and engagement index (CEI) is a combined measure used at the University of Washington to improve the quality of teaching. CEI reflects how challenging students found a course, and how engaged they were in it.*
[2] *Percent Agree + Strongly Agree is a measure used at The University of Texas to evaluate the quality of teaching.*

**Teaching Innovation:**
1. I developed the first hybrid-course at the UW Bothell, School of Business. The hybrid-course utilizes video tutorials, online trainings, and collaborative tools such as online discussion boards for case analyses. (Information Management and Analysis, 2011-Present)
2. I adopted a Harvard Business Publishing audiobook, which enabled students to listen to the material in addition to the hardcopy material. (Digital Business Lab, 2011-Present)
3. I pioneered the use of the graphic novel version of a Harvard case: iPremier - Denial of Service Attack (Enterprise IT Management, 2013-Present)
4. I pilot tested and initiated the use of e-text in classes at the UW Bothell, School of Business. (Information Management and Analysis, 2012)
5. I developed a business-analytics solver assignment for an introductory MIS course. It has been in use for MIS 301 sections, approximately 300 students. (The University of Texas at Austin, IT in Business, 2007)

**Teaching Assistantships:**
MIS 375, Strategic Information Technology Management (UT Austin) ..........................................2008-2010
MIS 380N, Business Process Excellence (UT Austin)...........................................................................2007-2008
MIS 301, Information Technology in Business (UT Austin) .................................................................2004-2006
ACC 501, Financial Accounting and Reporting (Sabancı University)........................................................2004
ACC 201, Introduction to Financial Accounting and Reporting (Sabancı University)......................2003-2004


## SERVICE

**University Service:**
Research seminar organizer (UTRGV) ...............................................................................................................2020
Student scholarships and awards committee member (UTRGV)........................................................ 2018-2020
Annual performance review committee member (UTRGV) ................................................................ 2017-2020
Lecturer in information systems or quantitative search committee member (UTRGV) ...........................2018
Lecturer in information systems search committee member (UTRGV)....................................................2018
eLearning committee member (UW Bothell).................................................................................... 2015-2017
Endorsed graduate faculty (UW Bothell) ........................................................................................ 2014-2017
Petitions committee chair (UW Bothell) .......................................................................................... 2011-2017
Internship sponsor of Khanh Ha, Matthew Marone, and Erick Ngo (UW Bothell)...................................2016
DECA (student club) academic advisor (UW Bothell) ........................................................................2016
Interfolio pilot tester for the new P&T process (UW Bothell) .................................................................2016
Internship sponsor of Poonam Singh (MBA), and Kelvin Jenneskens (UW Bothell) ...............................2015
The operations management faculty search committee member (UW Bothell).............................. 2014-2015
Internship sponsor of Anderson Tran (UW Bothell) .............................................................................2014
The marketing faculty search committee member (UW Bothell)..................................................... 2013-2014
Speaker (UW Bothell, Chancellor's Innovation Forum).........................................................................2012
Participated in the UW-IT e-text pilot (UW)........................................................................................2012
Academic advisor of Dylan D'Entremont (UW Bothell, Graduate student)..............................................2011


**Professional Service:**
Mini-track co-chair of "Location Analytics" (HICSS)...........................................................................2021
Chair of IoT/IoE special interest group (ISSIP) ............................................................................. 2015-2020
Mini-track co-chair of "Internet of Things" (HICSS) ..................................................................... 2016-2020
Mini-track co-chair of "Wearable Technologies and Quantified Self" (HICSS) ......................................2015
Track co-chair (ACIS Auckland) .......................................................................................................2014
Mini-track chair (AMCIS Chicago) ...................................................................................................2013
Chair of two mini-tracks with editorial responsibilities (AMCIS Seattle) ...............................................2012
Session chair for behavioral modeling (INFORMS Annual Meeting)......................................................2010

**External Reviewer for Academic Journals:**
Journal of Management Information Systems .................................................................................. 2015-2019
International Journal of Electronic Commerce.................................................................................. 2014-2019
Journal of Strategic Information Systems ........................................................................................ 2009-2010
Electronic Commerce Research and Applications ........................................................................... 2015-2016
European Journal of Operational Research ...................................................................................... 2009-2012
Electronic Commerce Research........................................................................................................ 2014-2016
IT Professional.................................................................................................................................. 2014-2016
Information Technology and Management ...............................................................................................2016
Journal of Organizational and End User Computing................................................................................2012
**External Reviewer for Refereed Conferences:**
International Conference on Information Systems .............................................................................2007-2016
Hawaii International Conference on System Sciences ...................................................................... 2010-2019
Americas Conference on Information Systems ................................................................................. 2008-2014
European Conference on Information Systems ................................................................................. 2015-2016
The Australasian Conferences on Information Systems ...........................................................................2014
Australian and New Zealand Academy of Management Annual Conference............................................2014

## PROFESSIONAL AFFILIATIONS

Association for Information Systems (AIS) ..................................................................................... 2007-Present
The International Society of Service Innovation Professionals (ISSIP)........................................... 2014-Present
The Institute for Operations Research and the Management Sciences (INFORMS) ........................ 2008-2014

## TECHNICAL SKILLS

Programming: Python, R, Wolfram, C, C++, Fortran, Visual Basic, Assembly
Software Packages: SPSS, Stata, Mathematica, MATLAB, NetLogo, Oracle RDBMS, MS Office, AWS S3
Operating Systems: Windows, Mac OS, Linux, Unix

## ACADEMIC AWARDS & SCHOLARSHIPS

Flipped Classroom Blueprinting Award (UTRGV) ................................................................................2020
NIH Funding Internal Competition Winner (UTRGV)...........................................................................2019
UW Bothell IT Funding (ASU-GSV Summit) .......................................................................................2016
Teaching and Learning Center Faculty Travel Grant (University of Washington).......................... 2014-2015
ICIS Junior Faculty Consortium at Auckland, New Zealand (AIS)........................................................2014
MIS Camp – AMCIS Junior Faculty Consortium at Savannah, GA (AIS)..............................................2014
Online Learning Institute Grant (University of Washington)..................................................................2014
HICSS Best Paper Nomination (Hawaii International Conference on System Sciences).........................2013
Junior Faculty Consortium (Association for Information Systems)..........................................................2012
Teaching and Learning Center Faculty Travel Grant (University of Washington)...................................2012
Dean's Fellowship (The University of Texas at Austin) .................................................................. 2004-2009
Academy of Management OCIS Doctoral Consortium Fellow (AOM)....................................................2007
Aysegul Arsoy Fellowship (Sabancı University) ............................................................................. 2002-2004
Finans Foundation Scholarship (Finans Foundation)...................................................................... 1998-2001
Prosperity Scholarship (Boğaziçi University Foundation)............................................................... 1996-1998
Scholarship of Prime Ministry (Prime Ministry of Turkey)............................................................ 1996-1998
National Physics Olympiad Team Member (TAL) ..................................................................................1995