

## Prof. Seda TOLUN TAYALI

### Personal Information

**Office Phone:** [+90 212 473 7070](tel:+902124737070) Extension: 18181

**Fax Phone:** [+90 212 590 4000](tel:+902125904000)

**Email:** [stolun@istanbul.edu.tr](mailto:stolun@istanbul.edu.tr)

**Web:** <http://aves.istanbul.edu.tr/stolun/cv>

**Address:** İstanbul Üniversitesi, Avcılar Kampusu, İşletme Fakültesi, Sayısal Yöntemler ABD 34322 Avcılar-İstanbul Avcılar-İstanbul

### International Researcher IDs

ORCID: 0000-0002-0618-2859

Publons / Web Of Science ResearcherID: S-3956-2019

Yoksis Researcher ID: 176391

### Education Information

Doctorate, Istanbul University, Institute of Social Sciences, Sayısal Yöntemler , Turkey 2003 - 2008

Postgraduate, Istanbul University, Institute of Social Sciences, Sayısal Yöntemler , Turkey 2001 - 2003

Undergraduate, Istanbul University, School Of Business, İngilizce İşletme, Turkey 1997 - 2001

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Other, Girişimcilik, TÜBİTAK TÜSSİDE, 2013

Education Management and Planning, Summer Course on Optimization in Machine Learning, University of Texas, 2011

### Dissertations

Doctorate, Destek Vektör Makineleri: Banka Başarısızlığının Tahmini Üzerine Bir Uygulama, Istanbul University, Institute of Social Sciences, Sayısal Yöntemler , 2008

Postgraduate, Web Tabanlı Uzaktan Öğretim ve Bir Üniversite Uygulaması, Istanbul University, Institute of Social Sciences, Sayısal Yöntemler , 2003

### Research Areas

Decision Theory, Multi Criteria Decision Making, Mathematics, Optimization, Game Theory, Statistics, Statistical Analysis and Applications, Natural Sciences

## Academic Titles / Tasks

Professor, Istanbul University, School of Business, Department of Business Administration, 2021 - Continues  
Associate Professor, Istanbul University, School of Business, Department of Business Administration, 2013 - Continues  
Research Assistant PhD, Istanbul University, School of Business, Department of Business Administration, 2008 - 2013  
Researcher, The University of Auckland, Faculty of Engineering Science , Engineering Science Department, 2009 - 2010  
Research Assistant, Istanbul University, School of Business, Department of Business Administration, 2002 - 2008

## Academic and Administrative Experience

Fakülte Kurulu Üyesi, Istanbul University, School Of Business, 2017 - 2020

## Courses

Operations Research, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Project Management, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Business Analytics and Big Data, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Proje Yönetimi, Doctorate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
İşletmecilikte Bilgisayar Uygulamaları, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
İşletmelerde Veri Analitiği, Doctorate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Data Mining and Knowledge Discovery, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Yöneylem Araştırması, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014  
Simulation, Postgraduate, 2015 - 2016  
Business Research, Postgraduate, 2015 - 2016, 2014 - 2015  
Business Simulation, Postgraduate, 2014 - 2015  
Introduction to Statistics, Undergraduate, 2014 - 2015  
Veri Kaynakları Yönetimi ve İşletmecilik Uygulamaları, Postgraduate, 2013 - 2014  
Applied Business Statistics, Undergraduate, 2013 - 2014

## Advising Theses

Tolun Tayalı S., Dijital Dönüşümde Endüstri 4.0 Değer Zinciri Temel Faaliyetler Analizi: Otomotiv Sektörü için Model Önerisi, Doctorate, E.Sert(Student), 2020  
Tolun Tayalı S., Avrupa Birliğine Üyelik Sürecinde AB ülkeleri ile Türkiye'nin Ekonomik Kriterlere Bağlı Performans Karşılaştırması, Doctorate, N.Seyhan(Student), 2019  
Tolun Tayalı S., Meta Sezgisel Yaklaşımlar ile P-Medyan Tesis Yeri Seçimi, Postgraduate, Ü.Tüzün(Student), 2019

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A novel backtesting methodology for clustering in mean-variance portfolio optimization**  
Tolun Tayalı S.  
Knowledge-Based Systems, vol.209, pp.1-12, 2020 (SCI-Expanded)
- II. **Türkiye'nin Avrupa Birliği Ülkelerine Makroekonomik olarak Yakınsaması Üzerine**  
Seyhan N., Tolun Tayalı S.  
Turkish Studies, vol.14, no.3, pp.995-1010, 2019 (SSCI)
- III. **Dimension reduction in mean-variance portfolio optimization**  
Tayalı H. A., Tolun S.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.92, pp.161-169, 2018 (SCI-Expanded)
- IV. **A mathematical immunochemoradiotherapy model: A multiobjective approach**

Esen O., Cetin E., Esen S.

NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS, vol.9, no.2, pp.511-517, 2008 (SCI-Expanded)

V. **A weapon-target assignment approach to media allocation**

Cetin E., Esen S.

APPLIED MATHEMATICS AND COMPUTATION, vol.175, no.2, pp.1266-1275, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Resampling and Ensemble Strategies for Churn Prediction**  
ÇELİK S., Tolun Tayalı S.  
Bilişim Teknolojileri Dergisi, vol.16, no.4, pp.263-273, 2023 (Peer-Reviewed Journal)
- II. **The study of indicators affecting customer churn in MMORPG games with machine learning models**  
Arık K., Gezer M., Tolun S.  
UPRAVLENETS-THE MANAGER, vol.13, no.6, pp.70-85, 2022 (ESCI)
- III. **Bibliometric Analysis of Scientific Studies Published on Game Customer Churn Analysis Between 2008 and 2022**  
ARIK K., GEZER M., TOLUN TAYALI S.  
Journal of Politics, Economy and Management (JOPEM), vol.5, no.1, pp.55-75, 2022 (Peer-Reviewed Journal)
- IV. **Müşteri İlişkileri Süreçlerinin VZA Kullanarak Geliştirilmesi: Bilişim Sektöründe Uygulama**  
Sert E., Tolun Tayalı S.  
International Journal of Management and Administration, vol.5, no.9, pp.47-62, 2021 (Peer-Reviewed Journal)
- V. **Endeks Getirisi Yönünün İkili Sınıflandırma Yöntemiyle Tahmin Edilmesi: İMKB-100 Endeksi Örneği**  
ÖZDEMİR A. K., TOLUN S., DEMİRCİ E.  
Niğde Üniversitesi İİBF Dergisi, vol.4, no.2, pp.45-59, 2011 (Peer-Reviewed Journal)
- VI. **Operations Research Techniques in Cancer Treatment**  
TOLUN S., ÇETİN E.  
İstanbul Üniversitesi İşletme İktisadi Enstitüsü Yönetim Dergisi, no.58, pp.23-27, 2007 (Peer-Reviewed Journal)
- VII. **A Multicriteria Reward Allocation Model: The Orchestration of the Shapley Values**  
ÇETİN E., TOLUN S.  
International Journal of Pure and Applied Mathematics, vol.36, no.4, pp.353-364, 2007 (Peer-Reviewed Journal)
- VIII. **Silah Atama Problemine Çok Amaçlı Yaklaşım: Tamsayılı Hedef Programlama Modeli ve Elektronik Tablo Çözüm Önerisi**  
ÇETİN E., TOLUN S.  
Kara Harp Okulu Savunma Bilimleri Enstitüsü Savunma Bilimleri Dergisi, vol.4, no.1, pp.141-159, 2005 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Avrupa Birliği ve Türkiye'nin Maastricht Kriterleri Bağlamında Durum Değerlendirmesi**  
Seyhan N., Tolun Tayalı S.  
in: Sosyal, Beşeri ve İdari Bilimler Alanında Uluslararası Araştırmaları 5, Mahmut Yardımcıoğlu, Editor, Eğitim Yayınevi, Konya, pp.239-262, 2021
- II. **AB Ülkeleri ve Türkiye'nin Makroekonomik Performanslarının VZA ve Malmquist (Toplam Faktör Verimliliği) Endeksi İle Değerlendirilmesi**  
Seyhan N., Tolun Tayalı S.  
in: İktisat ve İdari Bilimlerde Araştırma ve Değerlendirmeler, Kemal Vatansever, Editor, Gece Publishing, Ankara, pp.253-280, 2021
- III. **Data Mining for Multicriteria Single Facility Location Problems**  
TOLUN S., TAYALI H. A.

in: Intelligent Techniques for Data Analysis in Diverse Settings, Çelebi N., Editor, Igi Global Publications, Hershey, Pa, pp.147-170, 2016

**IV. Data Mining for Multicriteria Single Facility Location Problems**

TOLUN S., TAYALI H. A.

in: Intelligent Techniques for Data Analysis in Diverse Settings, Dr. NUMAN ÇELEBİ, Editor, IGI GLOBAL, pp.147-170, 2016

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Improving Cardiovascular Disease Prediction Using Ensemble Learning Techniques and Dimensionality Reduction**  
KOÇ H., Zidelkhir A., TOLUN TAYALI S., EROL Ç.  
IIIrd International Congress on Medical Informatics, 28 - 30 September 2023
- II. **How Does Resampling Affect the Classification Performance of Support Vector Machines on Imbalanced Churn Data?**  
Çelik S., Tolun Tayalı S.  
y-BIS, İstanbul, Turkey, 25 - 28 September 2019, pp.145-152
- III. **Risk Management in Startups: How Using Lean Principles Helps Startups Manage Their Risks More Efficiently**  
ÇUBUKÇU C., GÜLSEÇEN S., TOLUN TAYALI S.  
International Conference on Engineering Technologies (ICENTE'17), Konya, Turkey, 7 - 09 December 2017, pp.146-150
- IV. **New Educational Leadership: Next Generation**  
GÜLSEÇEN S., KULA A., EROL Ç., TOLUN TAYALI S.  
World Education Day-2017(WED-2017), Dalian, China, 27 - 29 September 2017, pp.10
- V. **Crowdfunding success prediction: An emprical study on Indiegogo platform**  
TOLUN TAYALI S., GÜRLER C., Çağlar M.  
IISES 34th International Academic Conference, Floransa, Italy, 13 - 16 September 2017, pp.5
- VI. **Araç Stabilesini Geliştirmek Amacıyla Etkin Süspansiyon Parametrelerinin İstatiksel Yöntemler Kullanılarak Belirlenmesi**  
Sert E., TOLUN S.  
OTEKON 2016, 8. Otomotiv Teknolojileri Kongresi, Bursa, Turkey, 23 - 24 May 2016, pp.1-6
- VII. **Dimension Reduction in Optimal Portfolio Selection Problem Using Nonnegative Matrix Factorization and Nonnegative Principal Components Analysis**  
TAYALI H. A., TOLUN S.  
International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications (IC-SMHD-2016), 18 - 21 May 2016
- VIII. **B2C Market Segment Evaluation Using The AHP Based Simulation Approach For The Automobile Sector**  
Bulut D., Tolun S.  
3rd International Conf. on Quantitative and Qualitative Methodologies in the Economic and Administrative Sciences, Athens, Greece, 23 - 24 May 2013, pp.1-10
- IX. **Tıpta Yöneyem Araştırması Teknikleri ve Seçilmiş Uygulamalar**  
ESEN H. Ö., ÇETİN E., TOLUN S.  
İstanbul Üniversitesi Cerrahpaşa Tıp Fakültesi, 2. Tıbbi Biyoloji Kongresi, İstanbul, Turkey, 1 - 04 May 2006, no.1, pp.14

## **Episodes in the Encyclopedia**

- I. **İş ve İşletme Analitiği**  
Tolun Tayali S.  
TÜBİTAK Yayınları, pp.1, 2022

## **Other Publications**

- I. **Achieving Quality Treatment Plans with Reduced Angles in Intensity Modulated Radiotherapy Design**  
TOLUN S., Ehr Gott M.  
Technical Report, pp.1-36, 2010

## **Supported Projects**

Tolun Tayali S., Tayali H. A., Project Supported by Other Official Institutions, Makine öğrenmesi ile web tabanlı finansal portföy optimizasyonu yazılımı, 2019 - 2021  
Tolun Tayali S., Tayali H. A., TÜBİTAK Project, Web Tabanlı Finansal Portföy Optimizasyon Yazılımı, 2018 - 2019  
TOLUN TAYALI S., Project Supported by Higher Education Institutions, B2C MARKET SEGMENT EVALUATION USING THE AHP BASED SIMULATION APPROACH FOR THE AUTOMOBILE SECTOR, 2013 - 2013  
TOLUN TAYALI S., Project Supported by Higher Education Institutions, Kredi Derecelendirmede Makine Öğrenmesi Yaklaşımı: Avustralya Uygulaması, 2011 - 2012

## **Activities in Scientific Journals**

Istanbul Business Research, First Editor, 2018 - Continues  
İ.Ü. İşletme Fakültesi Dergisi, Committee Member, 2015 - 2018  
Collana del Dipartimento di Scienze Economico-Aziendali, Committee Member, 2012 - 2013  
İ.Ü. İşletme Fakültesi Dergisi, Editor, 2010 - 2011  
İ.Ü. İşletme Fakültesi Dergisi, Assistant Editor/Section Editor, 2007 - 2010

## **Memberships / Tasks in Scientific Organizations**

YAD, Member, 2006 - Continues  
Decision Analysis Society, Member, 2006 - Continues  
OR/MS, Member, 2006 - 2008

## **Scientific Refereeing**

Expert Systems with Applications, SCI Journal, May 2019  
Expert Systems with Applications, SCI Journal, March 2018  
Öneri Dergisi, National Scientific Refreed Journal, May 2016  
İ.Ü. İşletme Fakültesi Dergisi, National Scientific Refreed Journal, January 2013  
İ.Ü. İşletme Fakültesi Dergisi, National Scientific Refreed Journal, November 2010

## **Metrics**

Publication: 28  
Citation (WoS): 42

Citation (Scopus): 52

H-Index (WoS): 3

H-Index (Scopus): 3

## **Congress and Symposium Activities**

Workshop on Optimization in Machine Learning, Attendee, Teksas, United States Of America, 2011

Istanbul Universitesi Cerrahpaşa Tıp Fakültesi, 2. Tıbbi Biyoloji Kongresi, Attendee, İstanbul, Turkey, 2006

## **Awards**

TOLUN TAYALI S., Ünal Aysal Tez Ödüllendirmesi (Doktora Tezi), İktisadi Araştırmalar Vakfı, January 2009

## **Entrepreneurship Activities**

Limited, SEPER İş Analitiği Modelleme ve Yazılım , 04 September 2018, Co-Founder

## **Non Academic Experience**

İstanbul Üniversitesi