Lect. PhD BÜKRE YILDIRIM KÜLEKCİ

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: KIK-4504-2024
ScopusID: 57196040564
Yoksis Researcher ID: 187144

Education Information

Post Doctorate, Middle East Technical University, Institute of Applied Mathematics, Turkey 2023 - Continues
Post Doctorate, Universitaet Kaiserslautern, Department of Mathematics, Germany 2022 - 2023
Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Aktüerya Bilimleri (Dr), Turkey 2014 - 2021
Postgraduate, Middle East Technical University, Institute of Applied Mathematics, Financial Mathematics, Turkey 2018 - 2019
Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Aktuerya Bilimleri A.B.D, Turkey 2012 - 2014
Undergraduate, Hacettepe University, Fen Fakültesi, Aktüerya Bilimleri Bölümü, Turkey 2008 - 2012

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, RISK MEASUREMENT USING TIME VARYING EXTREME VALUE COPULAS, Hacettepe University, Fen Bilimleri Enstitüsü, Aktuerya Bilimleri A.B.D, 2021
Postgraduate, The effect of Turkish mortality improvements on the cost of annuities using entropy measure, Hacettepe Üniversitesi, Aktüerya Bilimleri (Yl), 2014

Research Areas

Statistics, Insurance, Actuarial Studies, Technical Demography

Academic Titles / Tasks

Lecturer, Middle East Technical University, Institute of Applied Mathematics, Actuarial Science, 2023 - Continues
Lecturer, Ankara University, Uygulamalı Bilimler Fakültesi, Aktüerya Bilimleri Bölümü, 2023 - 2024
Researcher, Universitaet Kaiserslautern, Department of Mathematics, 2022 - 2023
Lecturer, Middle East Technical University, Institute of Applied Mathematics, Actuarial Science, 2021 - 2022

Research Assistant, Middle East Technical University, Institute of Applied Mathematics, Actuarial Science, 2012 - 2021

Courses

Ruin Theory, Undergraduate, 2023 - 2024
Ruin Theory, Undergraduate, 2023 - 2024, 2022 - 2023
Life Insurance Mathematics, Postgraduate, 2023 - 2024, 2022 - 2023
Financial Risk Management, Undergraduate, 2022 - 2023
Risk Management and Insurance, Postgraduate, 2021 - 2022

Advising Theses

Kestel A. S., Yildirim Külekci B., The Impact of Dependence Between Claim Frequency and Severity on Expected Loss Using GLM: MTPL Application, Postgraduate, İ.ASLANÖZ(Student), 2024
Kestel A. S., Yıldırım Külekci B., Clustering Influence on MTPL Premium Estimation Using Credibility Approach, Postgraduate, İ.Onur(Student), 2023
Kestel A. S., Yıldırım Külekci B., Determination of spot wheat prices under climate impact using copula approach, Postgraduate, İ.Kayapınar(Student), 2022

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Ruin probability for heavy-tailed and dependent losses under reinsurance strategies**
Yildirim Külekci B., Korn R., Kestel A. S.
MATHEMATICS AND COMPUTERS IN SIMULATION, vol.226, pp.118-138, 2024 (SCI-Expanded)
II. **Vine Copula Approach to Understand the Financial Dependence of the Istanbul Stock Exchange Index**
Evkaya Ö. O., Gür I., Yildirim Külekci B., Poyraz G.
COMPUTATIONAL ECONOMICS, no.1, pp.1-46, 2024 (SCI-Expanded)
III. **Assessment of dependent risk using extreme value theory in a time-varying framework**
Yıldırım Külekci B., Karabey U., Kestel A. S.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.52, no.1, pp.248-267, 2023 (SCI-Expanded)
IV. **Assessment of longevity risk: credibility approach**
Kulekci B. Y., Kestel A. S.
JOURNAL OF APPLIED STATISTICS, vol.48, no.13-15, pp.2695-2713, 2021 (SCI-Expanded)

Articles Published in Other Journals

I. **Dependence Analysis of the ISE100 Banking Sector Using Vine Copula**
Yildirim Külekci B., Poyraz G., Gür I., Evkaya O.
ISTANBUL JOURNAL OF ECONOMICS, vol.73, pp.55-82, 2023 (ESCI)
II. **Effect of Turkish mortality developments on the expected lifetime and annuity using entropy measure**
Yildirim Külekci B., Büyükyazici M.
İstatistikçiler Dergisi: İstatistik ve Aktüerya, vol.13, no.1, pp.30-47, 2020 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Actuarial Present Value and Variance for Changing Mortality and Stochastic Interest Rates**

Yıldırım B., Kestel A. S., Ergökmen G.
in: Modeling, Dynamics, Optimization and Bioeconomics II, Pinto,Alberto,Zilberman,David, Editor, Springer-Verlag , Amsterdam, pp.495-512, 2017

Refereed Congress / Symposium Publications in Proceedings

I. **Analysis of the threshold dependence of degree related indices in weighted random graphs and complex networks**
Işlak Ü., Yildirim Külekci B.
The 3rd International Conference on Applied Mathematics in Engineering (ICAME'24) , Balıkesir, Turkey, 26 June - 28 July 2024, pp.96

II. **Modeling the Dependency in the Turkish Stock Market via the Dynamic Vine-Garch Model**
Evkaya O., Poyraz G., Yıldırım Külekci B., Gür İ.
25th (2022) International Congress on Insurance: Mathematics and Economics, Guangzhou, China, 12 - 15 July 2022, pp.62

III. **Optimal Dynamic Ruin Probabilities for Heavy-Tailed Losses Under Reinsurance Strategies**
Yildirim Külekci B., Korn R., Kestel A. S.
25th (2022) International Congress on Insurance: Mathematics and Economics, Guangzhou, China, 12 - 15 July 2022, vol.1, pp.114

IV. **Modelling dependence among Turkish financial institutions using dynamic Vine copula**
Gür İ., Evkaya O., Yıldırım Külekci B., Poyraz G.
VI. Anadolu International Conference on Economics, Eskişehir, Turkey, 13 - 15 May 2022, pp.179

V. **Ruin Probability in Heavy-Tailed Claims with Extreme Value Theory**
Yildirim Külekci B., Karabey U., Kestel A. S.
24th International Congress on Insurance: Mathematics and Economics, Illinois, United States Of America, 5 - 09 September 2021, vol.1, no.1, pp.101

VI. **Backtesting in Time Varying Extreme Value Copulas for Dependent Risks**
Yildirim Külekci B., Kestel A. S., Karabey U.
Online International Conference inActuarial Science (OICA), Lyon, France, 28 - 29 April 2020

VII. **Assessment of Longevity Risk on PensionFunds: Credibility Approach**
YILDIRIM KÜLEKCİ B., KESTEL A. S.
11th International Statistics Congress (ISC11), Bodrum, Turkey, 4 - 08 October 2019

VIII. **Assessment of Longevity Risk via CredibilityApproach**
YILDIRIM KÜLEKCİ B., KESTEL A. S.
4th National Insurance and Actuarial Sciences Congress (USAK), Ankara, Turkey, 24 - 25 June 2019

IX. **Extreme Value Theory on Valuation of Actuarial Risk**
YILDIRIM KÜLEKCİ B., KESTEL A. S., KARABEY U.
11. International Statistics Days Conference, BODRUM, Turkey, 3 - 07 October 2018

X. **Multivariate Extreme Value Theory on the Valuation of Tail Behavior in Actuarial Science**
YILDIRIM KÜLEKCİ B., KESTEL A. S., KARABEY U.
4th European Actuarial Journal Conference, Leuven, Belgium, 9 - 11 September 2018

XI. **Risk Measurement Using Extreme Value Theory: The Case of BIST100 Index**
YILDIRIM B., KESTEL A. S., KARABEY U.
10th International Statistics Congress, Ankara, Turkey, 6 - 08 December 2017

XII. **The Influence of Longevity Risk on Pension Funds: Turkish Case**
YILDIRIM B., KESTEL A. S.
3RD INTERNATIONAL RESEARCHERS, STATISTICIANS AND YOUNG STATISTICIANS CONGRESS, Konya, Turkey, 24 - 26 May 2017

XIII. **Actuarial present value and variance for changing mortality and stochastic interest rates**
Yıldırım B., Selcuk-Kestel A. S., Coşkun-Ergökmen N. G.

3rd International Conference on Dynamics, Games and Science, DGS 2014, Porto, Portugal, 17 - 21 February 2014, vol.195, pp.495-512

XIV. **Stokastik Faiz Oranı ve Mortalite Etkisi Altında Hayat Sigortası Prim Hesaplaması**
YILDIRIM B., KESTEL A. S., N Gülden C. E.
9. Uluslararası İstatistik Kongresi, Antalya, Turkey, 28 October - 01 November 2015

XV. **The effect of Turkish mortality improvements on the cost of annuities using entropy measure**
YILDIRIM B., BÜYÜKYAZICI M.
EURO Working Group Commodities and Financial Modelling, Ankara, Turkey, 12 - 14 May 2015

Supported Projects

Kestel A. S., Yildirim Külekci B., Association (NGO), Hava Kuvvetleri Komutanlığı Yardımlaşma Derneği 2023 Yılı Aktüeryal Değerlendirme, 2024 - 2024

KESTEL A. S., YILDIRIM B., AKARSU G., MERT Ö. M., HASGÜL E., ŞİMŞEK M., Project Supported by Higher Education Institutions, Hayat ve Hayat Dışı Sigorta Şirketlerinde Mali Yeterlilik Kriterlerine ait Faktörlerin Modellenmesi, 2017 - 2019

KESTEL A. S., YILDIRIM B., DANIŞOĞLU S., GÜNER Z. N., HASGÜL E., Project Supported by Higher Education Institutions, Türkiye Sigorta Sektöründe Varlık Yönetimi Stratejilerinin Solvency II Kriterlerine olan Etkisinin Ölçülmesi, 2015 - 2015

KESTEL A. S., KARA G., YAZICI C. F., YILDIRIM B., ÖZDEMİR A., Project Supported by Higher Education Institutions, Türkiye'de Elektrik Enerji Fiyatlandırmasının Risk Yönetimi Metodlarıyla Ölçülmesi, 2015 - 2015

KESTEL A. S., YILDIRIM B., Ekici M. A., YAKUT A., ŞİMŞEK M., Project Supported by Higher Education Institutions, Türkiye'deki Yapı Stoku Özelliklerine Bağlı Deprem Sigortası ve Reasürans Primi Değerlendirmesi, 2014 - 2015

KESTEL S. A., Project Supported by Other Private Institutions, Bireysel Emeklilik Sistemine Geçiş ve Aktarıma Yönelik Aktüeryal Değerlendirme, 2014 - 2014

Metrics

Publication: 23
Citation (WoS): 4
Citation (Scopus): 4
H-Index (WoS): 2
H-Index (Scopus): 2