#### **Personal Information**

Middle East Technical University, Institute of Applied Mathematics, 06800 Ankara, Turkey

E-mail | bukre@metu.edu.tr Phone | +90 312 210 5609 Fax | +90 312 210 2985 Date of Birth | 8<sup>th</sup> July, 1990 Nationality | Turkish



#### Research Interests

Extreme Value Theory, Longevity, Solvency Capital Allocation, Risk Measures and Optimization

## **Employement**

| 2012– Present | Research Assistant   |
|---------------|--|
|               | Middle East Technical University, Institute of Applied Mathematics |
|               | Actuarial Sciences Programme                                       |

#### Licenses

| 2011 | Trainee Actuary  |
|------|--|
|      | (Insurance and Economics, Mathematics, Statistics and Probability, Financial   |
|      | Mathematics)   |
| 2017 | Assistant Actuary (Accounting and Financial Reporting, Insurance Mathematics (Life and Non-Life), Risk Analysis and Actuarial Modeling, Financial Theory and Applications) |
|      | Republic of Turkey Prime Ministry Undersecreteriat of Treasury   |

## Language Skills

| Turkish | Native      |
|---------|-------------|
| English | Advanced    |
|         | YDS: 90/100 |

## Computer Skills

MATLAB, R, LaTeX, SPSS, MINITAB, MS Office (Excel, Word, PowerPoint)

## Teaching Experience

- IAM 582 Life Insurance Mathematics
- $\bullet\,$  IAM 583 Pension Fund Mathematics
- IAM 584 Advanced Actuarial Mathematics

## Education

| 2014–Present | Ph.D. in Financial Mathematics, (GPA: 3.64/4.00)                            |
|--------------|---|
|              | Middle East Technical University, Ankara, Turkey.                           |
| 2014–Present | Ph.D. in Actuarial Sciences,(GPA: 3.46/4.00)                                |
|              | Hacettepe University, Ankara, Turkey.                                       |
|              | Thesis: Risk Measurement Using Time Varying Extreme Value Copulas,          |
|              | Advisor: Assist. Prof. Dr. Uğur Karabey                                     |
|              |   |
| 2012 – 2014  | M.Sc. in Actuarial Sciences,(GPA: 3.71/4.00)                                |
|              | Hacettepe University, Ankara, Turkey.                                       |
|              | Thesis: The Effect of Mortality Improvements on the Cost of Annuities Using |
|              | Entropy Measure, Advisor: Assist. Prof. Dr. Murat Büyükyazıcı               |
|              |   |
| 2008 – 2012  | B.Sc. in Actuarial Sciences,  |
|              | Hacettepe University, Ankara, Turkey.                                       |

# Participations

| 2017 | Advanced Modelling in Mathematical Finance Workshop in Honor of Azize Hayfavi's 75th Birthday, Institute of Applied Mathematics, Middle East Technical University, Ankara, Turkey. |
|------|--|
| 2016 | 3rd Ankara-Istanbul Workshop on Stochastic Processes, Middle East Technical University, Ankara.  |
| 2015 | 2nd National Conference on Insurance and Actuarial Sciences, Hacettepe University, Ankara.   |
| 2015 | Workshop on Recent Developments in Insurance Finance, Istanbul.  |

## **Book Chapter**

2017

Modeling, Dynamics, Optimization and Bioeconomics II, Actuarial Present Value and Variance for Changing Mortality and Stochastic Interest Rates, Yıldırım B.,Kestel A. S., Ergökmen G., Springer Proceedings in Mathematics Statistics, ISBN:978-3-319-55236-1.

## Scientific Meetings

| 2017 | Yıldırım B., Kestel A. S., Karabey U., Risk Measurement Using Extreme Value Theory: The Case of BIST100 Index, 10th International Statistics Congress, Ankara, Turkey.   |
|------|--|
| 2017 | Yıldırım B., Kestel A. S., The Influence of Longevity Risk on Pension Funds: Turkish Case, 3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC), Konya, Turkey.                              |
| 2015 | Yıldırım B., Kestel A. S., Ergökmen G., Stokastik Faiz Oranı ve Mortalite Etkisi Altında Hayat Sigortası Prim Hesaplaması, 9th International Statistics Congress, Antalya, Turkey.   |
| 2015 | Yıldırım B., Büyükyazıcı M., The Effect of Turkish Mortality Improvements on the Cost of Annuities Using Entropy Measure, 55th Meeting of Euro Working Group for Commodities and Financial Modelling (EWGCFM), Ankara, Turkey. |

## **Projects**

| 2017–Present | Modeling of Factors Related to Financial Adequacy Criteria in Life and Non-Life Insurance Companies, (BAP-07-05-2017-003).                              |
|--------------|---|
| 2018         | Actuarial Analysis Report and Projection of Pension Fund Liabilities for Turkish Air Force Command Beneficial Association as of the date of 31.12.2017. |
| 2017         | Actuarial Analysis Report and Projection of Pension Fund Liabilities for Turkish Air Force Command Beneficial Association as of the date of 31.12.2016. |
| 2016         | Actuarial Analysis Report and Projection of Pension Fund Liabilities for Turkish Air Force Command Beneficial Association as of the date of 31.12.2015. |
| 2015         | Measuring the Effects of Turkish Insurance Sector Asset Management Strategy on the Solvency II Criteria, (BAP-07-05-2015-004).                          |
| 2015         | Actuarial Analysis Report and Projection of Pension Fund Liabilities for Turkish Air Force Command Beneficial Association as of the date of 31.12.2014. |

## Memberships

• Society for Industrial and Applied Mathematics (SIAM) Student Chapter