

Assoc. Prof. Yıldırım Akbal

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Ihsan Dogramaci Bilkent University, Turkey 2011 - 2015

Postgraduate, Koc University, Turkey 2009 - 2011

Undergraduate, Turkey 2004 - 2008

Dissertations

Doctorate, Piatetski-Shapiro prime number theorem and Chebotarev density theorem, Ihsan Dogramaci Bilkent University, 2015

Postgraduate, Variations on Erdős-Kac theorem, Koc University, 2011

Research Areas

Artificial Intelligence, Computer Learning and Pattern Recognition, Number Theory

Academic Titles / Tasks

Associate Professor, TED University, Graduate School, Applied Data Science, 2022 - Continues

Associate Professor, Atilim University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2020 - 2022

Assistant Professor, Atilim University, Fen Fakültesi, Matematik, 2018 - 2020

Lecturer, TED University, Faculty Of Arts And Sciences, Mathematics, 2016 - 2018

Courses

Pre-thesis Seminar, Postgraduate

Deep Learning for Data Science, Postgraduate

Computational Statistics, Undergraduate

Python for Data Science, Undergraduate

Time Series, Postgraduate, 2022 - 2023

Introduction to Calculus of One Variable, Undergraduate, 2017 - 2018, 2016 - 2017

Introduction to Probability Theory, Undergraduate, 2017 - 2018, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Prime numbers as values of nested Beatty sequences**
Akbal Y.
Ramanujan Journal, vol.64, no.4, pp.1303-1322, 2024 (SCI-Expanded)
- II. **A hybrid deep learning methodology for wind power forecasting based on attention**
Akbal Y., Ünlü K. D.
International Journal of Green Energy, vol.21, no.16, pp.3713-3722, 2024 (SCI-Expanded)
- III. **Variations on a theme of Mirsky**
Akbal Y., Güloğlu A. M.
International Journal of Number Theory, vol.19, no.1, pp.1-39, 2023 (SCI-Expanded)
- IV. **A univariate time series methodology based on sequence-to-sequence learning for short to midterm wind power production**
Akbal Y., Ünlü K. D.
Renewable Energy, vol.200, pp.832-844, 2022 (SCI-Expanded)
- V. **Cyclicity of elliptic curves modulo primes in arithmetic progressions**
Akbal Y., Güloğlu A. M.
Canadian Journal of Mathematics, vol.74, no.5, pp.1277-1309, 2022 (SCI-Expanded)
- VI. **A deep learning approach to model daily particular matter of Ankara: key features and forecasting**
Akbal Y., Ünlü K.
International Journal of Environmental Science and Technology, vol.19, no.7, pp.5911-5927, 2022 (SCI-Expanded)
- VII. **A short note on permutation trinomials of prescribed type**
Akbal Y., Temür B. G., Ogan P.
Communications in Algebra, vol.48, no.4, pp.1608-1612, 2020 (SCI-Expanded)
- VIII. **A note on values of beatty sequences that are free of large prime factors**
Akbal Y.
Colloquium Mathematicum, vol.160, no.1, pp.53-63, 2020 (SCI-Expanded)
- IX. **A short note on some arithmetical properties of the integer part of αp**
Akbal Y.
Turkish Journal of Mathematics, vol.43, no.3, pp.1253-1262, 2019 (SCI-Expanded)
- X. **On Waring–Goldbach problem with Piatetski-Shapiro primes**
Akbal Y., Güloğlu A. M.
Journal of Number Theory, vol.185, pp.80-92, 2018 (SCI-Expanded)
- XI. **Rough values of Piatetski-Shapiro sequences**
Akbal Y.
Monatshefte für Mathematik, vol.185, no.1, pp.1-15, 2018 (SCI-Expanded)
- XII. **Waring–Goldbach problem with Piatetski-Shapiro primes**
Akbal Y., Güloğlu A. M.
Journal de Théorie des Nombres de Bordeaux, vol.30, no.2, pp.449-467, 2018 (SCI-Expanded)
- XIII. **Friable values of piatetski-shapiro sequences**
Akbal Y.
Proceedings of the American Mathematical Society, vol.145, no.10, pp.4255-4268, 2017 (SCI-Expanded)
- XIV. **Waring’s problem with Piatetski-Shapiro numbers**
Akbal Y., Güloğlu A. M.
Mathematika, vol.62, no.2, pp.524-550, 2016 (SCI-Expanded)
- XV. **Piatetski-Shapiro meets Chebotarev**
Akbal Y., Muhtar Güloğlu A.
Acta Arithmetica, vol.167, no.4, pp.301-325, 2015 (SCI-Expanded)