# LEVENT TOKSOZ

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Personal/Projects Website: <a href="https://letoksoz.github.io/">https://letoksoz.github.io/</a>

# **EDUCATION**

# University of Michigan, Ann Arbor

2013-2017

Bachelor of Science in Physics with Honors

- Double-major in Pure Math
- CGPA: 3.715/4.00. Physics GPA: 3.763/4.00. Pure Math GPA: 3.643/4.00.

Department of Physics Undergraduate Honors Program

- **Honors Thesis:** "21 cm Hydrogen Line and Its Power Spectrum" (2015–2017)
- <u>Synopsis:</u> Cosmological/Mathematical/Computational analysis of sensitivity of the parameters inherent to the 21cm power spectrum using Python. Techniques employed: Computational Physics, Mathematical Modeling, Literature Review. <u>Advisor:</u> Professor Dragan Huterer

<u>Selected Physics Coursework:</u> Mechanics, Electricity & Magnetism, Stat & Thermal Physics, Computational Physics, Astrophysics, Particles & Cosmology, Quantum Mechanics, Advanced Lab <u>Selected Math Coursework:</u> Linear & Modern Algebra, Differential Equations & Geometry, Probability, Boundary Values, Calculus, Coding

<u>Academic Computer Science:</u> Programming Concepts, Object-oriented Programming, Algorithms, Simulations via Applied Databases & Massive Datasets. <u>Languages:</u> Julia, Java, C, C++, Python

# **Tarsus American College**

2009-2013

International Baccalaureate (IB) student

• GPA 4.73/5.00. Half Merit Scholarship

#### RESEARCH EXPERIENCE

# Koç University; Istanbul, Turkey

August 2017—Present

Visiting Researcher

Collaborating with Associate Professor Professors Alkan Kabakcioglu (Department of Physics) & Associate Professor Deniz Yuret (Department of Computer Engineering)

• <u>Project:</u> Investigating the functional role and the interacting partners of NeuroD2 protein

with goal of generating insights into its function in neuronal differentiation

• Role: Apply machine learning techniques (Logistic Regression, Neural

<u>Networks and Convolutional Neural Networks</u>) using Julia to massive datasets, incl. ChIP-Seq data and histone binding data, in order to identify and characterize binding sites of NeuroD2 on DNA and understand their nature

#### **Interdisciplinary Paper Project; Istanbul, Turkey**

June 2017—Present

"Machine Learning and Financial Distress Prediction" (Work in Progress)

• <u>Co-Authors:</u> Associate Professor Fevzi Serkan Ozdemir (Department of Accounting, Izmir

Democracy University) & Assistant Professor Tuba Toksoz (Department of

Accounting, Koc University) & Caner Berkay Antmen

• **Project:** Developing a model to investigate the effect of financial ratios on the

likelihood of financial distress of the firms listed on the Borsa Istanbul Stock

exchange from 2005 to 2016.

• Role: Employ machine-learning algorithms (Logistic Regression, Beehive

Algorithm, Neural Networks, Random Forests) in order to identify factors

correlating with financial distress via historical dataset using Python

Language.

# **LEVENT TOKSOZ**

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# University of Michigan, Ann Arbor

2015—2017

Research Assistant to Professor Dragan Huterer (Department of Physics)

• Utilized theoretical & computational cosmology to generate simulations of noise inherent to astrophysical power spectrums. Participated in weekly cosmology paper workshops

# **WORK EXPERIENCE**

# **Internship at Konfides Technologies**

**June 2017— December 2017** 

• Contributed to embedded system software development using C

<u>Chess:</u> Competitive player since 2001. Rating: 1872. University of Michigan Chess Club.

2<sup>nd</sup> place in MEB(Turkish Educational Administration) Turkish Championships, 2008

**Languages:** Turkish: native. English: fluent