## BARIŞ C. EKIM

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#### **Education**

## MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

Cambridge, MA

Bachelor of Science in Computer Science and Molecular Biology and Mathematics

May 2020

Relevant Coursework: Single Variable Calculus, Classical Mechanics, Principles of Chemical Science, Nucleic Acids

## ARMAND HAMMER UNITED WORLD COLLEGE OF THE AMERICAN WEST

Montezuma, NM

May 2016

International Baccalaureate Diploma

ACT: E: 36 M: 36 R: 35 S: 36, GPA: 5.00/5.00

## Research Experience

## WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH

Cambridge, MA

## **Undergraduate Research Assistant**

September 2016 – present

Developing computational approaches for discovery of RNA structures that control noncoding sequences in gene regulation on sex chromosomes in Page lab.

## ISTANBUL UNIVERSITY

Istanbul, Turkey

**Research Staff Member** 

June 2016 – August 2016

Worked on detecting Z-DNA formation along the S. pombe genome via web-based software as part of Bioinformatics and Computational Biology Group at Istanbul University Department of Molecular Biology and Genetics. Planned and put into code the backbone of the search mechanism, translated and revised reports and presentations, and provided ready access to all experimental data for the supervisor.

## MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

Cambridge, MA

## **Research Assistant**

June 2015 – August 2015

Worked on protein structure database search via entropy-based hierarchical clustering as a visiting member of Berger Lab at the Computer Science and Artificial Intelligence Laboratory (CSAIL). Offered a novel and functional approach to the problem at hand, successfully implemented the solution computationally, engineered and optimized the full-stack web based tool at esperite.csail.mit.edu. Submitted manuscript for publication.

## **ISTANBUL TECHNICAL UNIVERSITY (ITU)**

Istanbul, Turkey

## **Research Assistant**

May 2015 – August 2016

Worked on thermal modeling of compacted graphite iron (CGI) drilling and waste textile fiber reinforced polymer composites at the Department of Materials Engineering at Istanbul Technical University Graduate School of Science. Evaluated existing research techniques and recommended improvements to ensure productivity, compared experimental and theoretical results and suggested solutions, and operated laboratory equipment effectively. Submitted manuscript for publication.

## TURKISH AIR FORCE ACADEMY

Istanbul, Turkey

## **Research Assistant**

May 2013 – June 2015

Conducted research on the integration of hydrogen fuel cells into unmanned aerial vehicles at the Department of Aeronautics and Aerospace Engineering. Conducted a variety of independent investigations in the planning, development, and implementation of original experimental procedures within the overall scope of the research project, and collected, analyzed, and reported on experimental data. Submitted manuscript for publication.

# **Additional Experience**

# SOCIETY FOR INTELLECTUAL GUIDANCE AND MENTORSHIP IN ACADEMIA

Istanbul, Turkey

## **Founder, Executive Director**

May 2014 – present

Provided mentorship for 500+ middle and high schoolers in their pursuit of academic expertise and skill building, and guidance for parents to support gifted children.

## UNIVERSITY OF NEW MEXICO

Albuquerque, NM

**Department Assistant** 

March 2016 - April 2016

Maintained office schedule by picking-up and delivering items at the UNM Center for Advanced Research Computing (CARC).

#### **Skills and Interests**

Technical: Working knowledge in C/C++, Go, PHP/JavaScript. and Python, limited knowledge in R

**Language:** Fluent in Turkish and English, conversant in French **Interests:** Music composition and production, chess, fitness