

ALI REZA IBRAHIMZADA

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Marmara University RTE Campus

Sureyyapasa Basibuyuk Yolu ◇ 34854, Maltepe, Istanbul, Turkey

EDUCATION

| | |
|---|---|
| Marmara University, Istanbul, Turkey Bachelor of Science Department of Computer Engineering | June 2020 - Present CGPA: 3.98/4.00 |
| Istanbul Sehir University, Istanbul, Turkey Bachelor of Science Department of Computer Science and Engineering | August 2018 - June 2020 CGPA: 3.96/4.00 |
| Khana-e-Noor, Mazar-e-Sharif, Afghanistan High School | March 2014 - January 2017 Grade: 99%. Rank: 1 |

RESEARCH EXPERIENCE

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| Marmara University, Istanbul, Turkey Research Student, Advisor: Dr. Mehmet Kadir Baran <ul style="list-style-type: none">- <i>Artificial Intelligence:</i> Utilizing deep learning techniques to estimate the depth of different objects in a scene using stereo images. <i>This is part of senior graduation project, and an ongoing research work.</i> | July 2021 - Present |
| University of Illinois Urbana-Champaign, IL, USA Research Intern, Advisor: Dr. Reyhaneh Jabbarvand <ul style="list-style-type: none">- <i>Software Engineering and Artificial Intelligence:</i> Design and implementation of deep learning techniques to construct an automated test oracle. <i>This is an ongoing research work.</i> | May 2021 - Present |
| Istanbul Technical University, Istanbul, Turkey Research Assistant, Advisor: Dr. Ali Cakmak <ul style="list-style-type: none">- <i>Machine Learning:</i> Design and development of a clustering-based framework for predicting student success, and extending the proposed framework with the novel statistical learning algorithms. The models were evaluated on a real life student-course dataset, and our proposed framework improved the state-of-the-art methods by nearly 36%.- <i>Bioinformatics and Machine Learning:</i> Analyze SARS-Cov-2 mutation patterns in the virus genome using deep learning, and use the results to improve the production of future vaccines. <i>This is an ongoing research work.</i> | June 2020 - Present |

Istanbul Sehir University, Istanbul, Turkey
Research Assistant, Advisor: Dr. Ali Cakmak

June 2019
- June 2020

- *Bioinformatics and Machine Learning*: Design and development of a hierarchical-based framework for classification of living organisms. Moreover, development of a supervised learning model for predicting the predisposition to colorectal cancer based on SNP profiles of immune phenotypes. The proposed models improved the state-of-the-art methods both in terms of accuracy and f1-score.

TEACHING EXPERIENCE

Istanbul Sehir University, Istanbul, Turkey
Teaching Assistant

September 2019
- June 2020

Activities and Responsibilities: Preparing assignments, grading assignments, grading exams, holding practice sessions, and holding office hours.

- ENGR 101 (Introduction to Programming) in Fall 2019
- ENGR 102 (Programming Practice) in Spring 2020

SOFTWARE DEVELOPMENT EXPERIENCE

Please refer to my [GitHub](#) to check my projects.

Marmara University, Istanbul, Turkey
Projects

June 2020
- Present

- *Certificiency*: We designed and implemented an Event Management System which eases the process of event creation, event management, and issuing e-certificates to participants of an event. Certificiency is based on a peer-to-peer architecture and it is specifically built for big institutions.
- *Data Labeling System*: We designed and implemented a Data Labeling System for labeling instances of different datasets using Java. Users can load their datasets in a pre-defined format, and the application exports many useful metrics which helps in understanding the quality of labeled data.
- *Zoom Poll Analyzer*: We designed and implemented a Poll Analysis System for analyzing poll results of Zoom using Python. Users can load their student lists, answer keys and polls based on a pre-defined format. The application exports different statistics and reports ranging from attendance to clustering analysis for cheat detection.

Istanbul Sehir University, Istanbul, Turkey
Projects

August 2018
- June 2020

- *Smart Advisor*: An intelligent web-based agent which uses machine learning to help students predict their letter grades before registering to a course. Instructors can follow their advisees progress and view different statistics of the class. Students can rate their courses and instructors which affects later predictions.

PUBLICATIONS

Please refer to my [Google Scholar](#) to check my publications.

Journal Publications

- J1.** Sohsah G., Ibrahimzada A. R., Ayaz H., & Cakmak A. (2020). Scalable Classification of Organisms into a Taxonomy Using Hierarchical Supervised Learners. *Journal of Bioinformatics and Computational Biology*. doi: [10.1142/S0219720020500262](#)

Conference/Workshop Publications

- C1.** Cakmak A., Ibrahimzada A. R., Arikan S., Ayaz H., Demirkol S. et al. (2019). Predicting the Predisposition to Colorectal Cancer based on SNP Profiles of Immune Checkpoints Using Supervised Learning Models. *VII. International Molecular Medicine Congress*, 20-21. ([congress book](#)) ([full-text](#))

Manuscripts under review

- M1.** Ibrahimzada A. R., & Cakmak A. (2021). Predicting Student Grades in Courses: A Clustering-Based Approach. *IEEE Transactions on Learning Technologies*.
- M2.** Cakmak A., Ibrahimzada A. R., Arikan S., Ayaz H., Demirkol S. et al. (2021). Predicting the Predisposition to Colorectal Cancer based on SNP Profiles of Immune Phenotypes using Supervised Learning Models. *IEEE Journal of Biomedical and Health Informatics*.

Manuscripts to be submitted

- N1.** Ibrahimzada A. R., Tekinoglu D., Varli Y., & Jabbarvand R. (2021). Revisiting The Oracle Problem: Learning The Semantic Relationship Between Inputs and Outputs.

HONORS AND AWARDS

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| • Academic Achievement Scholarship, 100% scholarship in accordance with high GPA in 2019-2020, 2020-2021, and 2021-2022 academic years. Istanbul Sehir University & Marmara University. | July 2019 |
| • Valedictorian of graduating classes in high school. Khana-e-Noor Educational Network. | January 2017 |
| • Travel Award for attending QUEST-2015, 4th International Festival of Biotechnology in Lucknow, India. Khana-e-Noor Educational Network. | August 2015 |

ACTIVITIES

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|--|-----------------------|
| • Team leader, 11 th Afghanistan National Science Competition, Kabul, Afghanistan | September 2016 |
| • Team member, 4 th International Festival of Biotechnology, Lucknow, India | August 2015 |

TEST SCORES

TOEFL iBT (CEFR Level C1)
Education Testing Service (ETS)

October 2021
- October 2023

| Reading | Listening | Speaking | Writing | Overall |
|---------|-----------|----------|---------|---------|
| 23 | 27 | 26 | 27 | 103 |

LANGUAGES

- Persian - Native or bilingual proficiency
- Pashto - Native or bilingual proficiency
- English - Full professional proficiency
- Turkish - Professional working proficiency

FAVOURITE COURSES

- CSE 4088 - Introduction to Machine Learning
- CS 240 - Exploratory Data Analysis
- UNI 123 - Textual Analysis and Effective Communication
- ENGR 102 - Programming Practice
- CSE 3044 - Software Engineering