EDIN GUSO

Lausanne, Switzerland
edin.guso@epfl.ch | LinkedIn
+905373843172

RESEARCH INTERESTS

I am interested in deepening my knowledge about algorithms, programming languages, automata theory, artificial intelligence, and robotics and would like to conduct research in one of these fields.

EDUCATION

EPFL – Lausanne, Switzerland   September 2021 - June 2023 (Expected)
M.Sc. in Computer Science,
School of Computer and Communication Sciences

SABANCI UNIVERSITY - Istanbul, Turkey   September 2016 - June 2021
B.Sc. in Mechatronics Engineering and B.Sc. in Computer Science,
Faculty of Engineering and Natural Sciences
- Cumulative GPA: 3.96/4.00
- Courses: Artificial Intelligence, Algorithms, Programming Languages, Introduction to Robotics

HONORS AND AWARDS

SABANCI UNIVERSITY - Istanbul, Turkey
- Dean's High Honor List (Fall 2016, Spring 2017, Fall 2017, Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021)
- Awarded with 50% scholarship for achievement in SAT exam
- Awarded with "Sakip Sabanci 100% Encouragement Scholarship" for the 2019-2020 Academic Year (Fall 2019 and Spring 2020) because of overachievement

ACADEMIC WORK EXPERIENCE

SABANCI UNIVERSITY - Istanbul, Turkey   September 2019 - December 2019
Learning Assistant (Logic and Digital System Design Course)
- Assisted students by holding weekly office hours and helped them with their Logic and Digital System Design course material.
- Attended the labs to assist the students and to grade their work.

UNIVERSITY OF TEXAS AT AUSTIN - Austin, TX, USA   July 2019 - August 2019
Summer Intern in Autonomous Systems Group
Supervisor: Prof. Ufuk Topcu
- Implemented a Graphical User Interface (GUI) using Qt Creator (in C++) for automated mission planning and controller synthesis.
- Collaborated with a MSc student in the planning of GUI design.
- Attended weekly meetings with my supervisor to inform him about my progress.
- Presented the work done in the final meeting to my supervisor and the PhD students in the group.

SABANCI UNIVERSITY- Istanbul, Turkey   February 2019 - June 2019
Learning Assistant (Advanced Programming Course)
- Helped students with their Advanced Programming homeworks and with their programming related questions during weekly office hours.

SELECTED PROJECTS

SABANCI UNIVERSITY - Istanbul, Turkey   September 2021 - December 2021
Software Engineering Term Project
- Developed a business idea based on fresh food delivery.
- Designed an e-commerce webpage and a mobile app using Django, React and React Native.

SABANCI UNIVERSITY - Istanbul, Turkey   October 2019 - June 2020
Graduation Project Thesis: Application of autoencoder neural networks for CFD Problems
Supervisor: Prof. Serhat Yesilyurt
- Reviewed the literature on machine learning applications related to CFD problems and spotted the gaps therein.
- Created datasets using COMSOL and MATLAB.
- Developed a machine learning model for regression and image reconstruction using the autoencoder and deep learning libraries in MATLAB.

SABANCI UNIVERSITY - Istanbul, Turkey   February 2020 - June 2020
Database Systems Term Project
- Developed a database using MySQL.
- Designed an e-commerce webpage in PHP and HTML languages.
- Implemented all the required database operations.

SABANCI UNIVERSITY - Istanbul, Turkey   November 2019 - December 2019
Machine Learning Term Project
- Developed a machine learning model that can determine whether a credit applicant is reliable.
- Focused on testing different learning algorithms (logistic regression, decision tree, random forest, and their adaboosted versions) and picked the most suitable one for the given problem.

SABANCI UNIVERSITY - Istanbul, Turkey   November 2019 - December 2019
Algorithms Term Project
- Addressed an NP-Complete problem (Hamiltonian Path problem) for the algorithms class.
- Assisted in every aspect of the project working mostly on the approximation algorithm and on its theoretical analysis.

SABANCI UNIVERSITY - Istanbul, Turkey   April 2019 - May 2019
Motion Control of a Flying Robot (Quadrotor)
- Designed a robust controller for hovering and trajectory-tracking of a quadrotor in MATLAB.
- Tested the controller's ability to perform several different tasks (trajectories) in Simulink.

SKILLS

Language: Bosnian *(Native)*, Turkish *(Native)*, Croatian *(Native)*, Serbian *(Native)*, English *(Advanced)*, German *(Beginner)*
Computer: C, C++, C#, Python, React, MATLAB and Simulink, LADDER Logic, ST Language, MySQL, Scheme, Prolog, COMSOL, LTSpice, Xilinx, SOLIDWORKS, Microsoft Office Apps

VOLUNTEER WORK

SABANCI UNIVERSITY - Istanbul, Turkey   *September 2016 - December 2016*
CIP (Civil Involvement Project)

- Visited a rest home every week and communicated with elders.
- Established meaningful relationships through the conservations we had and the games we played.