MUSTAFA MERT SAYGI

https://www.linkedin.com/in/mert-saygi/• Projects Portfolio: https://mert-saygi.github.io/ • https://github.com/mert-Saygi
mms2339@columbia.edu • 549 W 133th, New York, NY, 10025 • (646) 255-6041

EDUCATION

Columbia University — *Bachelor of Science* — May 2024
Major: Electrical Engineering **Minor:** Mechanical Engineering **GPA:** 4.10
Relevant Classes: Signals and Systems, Circuit Analysis (LTSpice), Computer Graphics and Design (SolidWorks), Electronic Circuits, Fundamentals of Computer Systems, Python for Engineers, Data structures in Java, Classical Control Systems
Transcript

EXPERIENCE

Columbia University Formula SAE Racing Club (CUFR) — **Sept. 2020 – Present**
Low Voltage Chief (previously Charging System Lead and Shutdown Circuit System Lead) — *15 hours/week*
- Led the Low Voltage team of approximately 25 members in designing, assembling, testing, and integrating the 5 low voltage systems of our electric vehicle: shutdown system, low voltage enclosures, wiring harness, telemetry, and software
- Mentored new members of the CUFR team on electrical skills such as PCB design, soldering, crimping, and electronics testing
- Managed numerous projects under the Low Voltage team and ensured that deadlines and milestones set by our advisors were met
- Spearheaded the design and development of an efficient CAN-based battery pack charging algorithm using Simulink

Magnetic Resonance Scientific Engineering for Clinical Excellence Laboratory — **Jan. 2022 – Present**
Undergraduate Researcher — *5 hours/week*
- Designed, programmed, and assembled an automated calibration system for a coil winder for a localized head MRI scanner

Lab Assistant for Introduction to Electrical Engineering — **Sep. 2022 – Present**
Lab Assistant — *10 hours/week*
- Instructed a total of 20 students taking the *Introduction to Electrical Engineering* class on the basics of electrical engineering through experiments conducted in an electrical engineering lab and graded their assignments weekly

Aselsan *(Turkish defense corporation)* — **June 2022 – July 2022**
Defense System Technologies Department Electrical Engineering Intern — *45 hours/week*
- Analyzed data from underwater sonar sensors using MATLAB in order to improve the accuracy of a submarine detection system
- Devised and tested methods to minimize the electromagnetic interference experienced by an RS-485 communication bus in order to achieve a desirable signal-to-noise ratio and justified the solutions to top Turkish navy officers

Columbia University Robotics Club — **Sept. 2021 – May 2022**
Mechanical Engineering Team on the MATE ROV project — *6 hours/week*
- Designed the frame of an underwater robot to compete in the MATE ROV competition using SolidWorks to then manufacture it by water jetting and drilling high density polyethylene as well as 3D printing some smaller components

Columbia University Engineering Student Council — **Sept. 2021 – May 2022**
Technology Representative — *5 hours/week*
- Actively lead initiatives in the Communications and Policy Committee while also serving as the student body representative on the Undergraduate Mental Health Collaborative and the Columbia University Information Technology committee meetings
- Led two teams of 20+ students to maintain the WikiCU website as well as the student-lead professor review website culpa.io

Related Digital *(omnichannel campaign management solution provider based in Turkey)* — July. 2021 – Sept. 2021
IT Intern — *45 hours/week*
- Developed full coverage unit tests for REST API methods in .NET Core for the company's customer data analysis software
- Designed an app to encrypt and relocate 10,000+ customer files from local storage to a Microsoft Azure Storage Server using SQL

PROJECTS

Harvard CS50: Game Development Track — June 2021 – Aug. 2021
Online Course
- Completed an 11-Week Online Course where I learned 2D game development with Lua and 3D game development with Unity
- Designed my own virtual reality 3D maze game using Unity and coding in C#

The Impact of Social and Emotional Learning on Creativity Development — Jan. 2021 – Sept. 2021
Co-Author of a Book Chapter
- Investigated, wrote, and published a book chapter discussing the link between SEL and creativity in students

SKILLS

Coding: Python, JavaScript, HTML/CSS, Java, Arduino, Lua, C#, C, C++, MATLAB, Simulink, SQL, .Net CORE, Swift
Manufacturing: Soldering, Crimping, PCB Milling, 3D Printing, Woodworking, Water Jetting, Laser Engraving, CNC Machining
Design: SolidWorks, KiCAD, LTSpice, Blender, iMovie, GarageBand, GIMP, Photoshop
Languages: English, Turkish, Spanish, Arabic
Soft Skills: Leadership, conscientiousness, communication, time management, perseverance, coachability