# **SELIN KAYA**

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## **EDUCATION**

TED Ankara College - Ankara, Turkey

2020 - Present

IB Diploma Programme

Anticipated Graduation: July 2024

HL: Mathematics (Analysis & Approaches), Chemistry, English B; SL: Physics, Environmental Systems and Societies, Turkish A

#### INTERNSHIP EXPERIENCE

# Turkish Aeronautical Association, Ankara, Turkey

June 2023 - July 2023

Turkish Aeronautical Association is a non-profit organisation that aims to increase public awareness and participation in aviation-related activities and the national body governing air sports in Turkey

- Took part in various roles in technical fields ranging from aircraft maintenance including methods to lengthen the engine's cycle lifetime via adjusting the electrical DC power alternated from the motion of the propeller
- Engaged in laboratory studies where I expanded my knowledge of Non-Destructive Testing methodologies, ultrasonic testing, magnetic particle inspection, liquid penetrant testing, and radiography
- Networked with accomplished engineers and set up mentorship sessions to navigate my academic and career decisions to
  equip myself with the skills and experiences needed to succeed in the industry in the future

# Securitas AB, Ankara, Turkey

August 2022 – September 2022

Securitas AB is a Sweden-based company that provides monitoring, consulting, and investigation to enhance physical and electronic security in 53 countries worldwide

- Shadowed one of the CEOs and attended meetings on system glitch analysis, cyber security and information security controls
  and the company's ESG reporting discussions
- Experienced the industry and company culture as well as building a network of professionals in the field

#### **ACADEMIC ENRICHMENT ACTIVITIES**

Algorithm Course June 2023 – Present

- Learn programming with C, C++ and Python coding based on theoretical mathematics, and later apply them to real-life cases
- Completed projects and uploaded them on <u>my personal GitHub</u>, such as my model of Turkey's 2022 inflation and my
  calculation model for the velocity of a rocket from user input

## Kadir Has University: Augmented Mechanics Course, Istanbul, Turkey

**July 2023** 

- Attended a two-week program on augmented mechanics delivered by Nihat Berker, Emeritus Professor of Physics at the Massachusetts Institute of Technology (MIT) on topics such as viscosity, quantum mechanics, general theory of relativity, Lorentz transformation, rocket action and satellite motion, collisions up to three dimensions and angular momentum
- Prepared daily assignments and deliverables on calculus, graphical representation of energetic particles, finding the
  gravitational field of infinite wires, mechanical systems operating underwater, and more
- Completed multiple exams and ranked among the top 10% of students in the program, winning a Certificate of Success

## **EXTRACURRICULAR ACTIVITIES**

#### TED Robotics Club, Ankara, Turkey

September 2021 - Present

- Started an initiative to promote the club among other women in STEM in my school as the first female mechanic in the club, recruited 3 new members to the mechanics division and trained them
- Attended weekly club sessions and helped with executive planning such as finalising the club's competition calendar, tracking
  agenda items for the meetings and following up on the upcoming deadlines with the corresponding team members
- Participated in designing the competition robot by working on innovative designs and codes to ensure the resilience and adaptability of the robot with consideration of time and resource constraints

- Led the Computer-Aided Design division where we used Fusion 360 and On Shape to design every component of the robot and contributed to the codes that instruct the robot to digitally connect to the joystick
- Competed in the <u>First Robotics Competition (FRC)</u>, Istanbul, Turkey in March 2022 and 2023 and won the Istanbul Regional Rookie All-Star Award in the 2022 FRC competition as Team 8780

Pianist and Drummer 2011 – Present

- **Pianist**: Privately tutored for 12 years, play in a jazz band alongside classmates accompanying with contrabass, cornet, trumpet and drums, performed in school events
- **Drummer**: Privately tutored for 9 years, play in a rock band alongside friends accompanying with lead guitar, rhythm guitar and vocals, performed at the school's auditorium opening ceremony, will be holding a concert for charity

#### TED Chess Club, Ankara, Turkey

September 2021 – Present

- Attended weekly practice sessions on material count, piece activity, piece mobility, pawn structure, space, and king safety
- Attended over 15 in-person and online tournaments (i.e., hosted on the <u>lichess.org platform</u>)
- Surveyed club members on what workshops they want to have and delivered presentations on strategic moves and ideas

# **European Youth Parliament**, Ankara, Turkey

16 - 20 August 2021

- Represented my high school solo as part of the Culture and Education Committee during the conferences
- Participated in the role of a delegate in political debates on ways that Member States could manage the integration of information and communication technologies (ICT) in education and training systems more efficiently in case of a pandemic
- Exchanged ideas among 130 other members across the continent

## **AWARDS**

Insights Engineering Programme, Immerse Education Blog Competition, Cambridge, England

Summer 2023

Won a 50% scholarship as a runner-up for my blog article on why generative AI technology will be the next industrial revolution

Creative Writing Programme, Immerse Education Blog Competition, Oxford, England

Summer 2022

Won a 50% scholarship to the <u>Immerse Residential: Oxford Creative Writing Summer Course</u> where I developed creative writing skills and learnt about writing forms and fiction writing skills such as plot and character development from Oxford colleges and went on trips to cultural and recreational spots in Oxford to find inspiration for freeform creative writing sessions

## Sait Faik Abasiyanik Poetry Competition

Summer 2021

Ranked second in the poetry competition on the theme of freedom during the pandemic

#### **VOLUNTEERING**

Physics and Mathematics Tutor

February 2023 – Present

- Contacted a student who was a survivor of the 2023 Earthquakes in Turkey and offered weekly tutoring and other academic support throughout the school year
- Supported the student's transition to English as the primary language of education by providing resources to help them translate their previous course knowledge from Turkish to English

Solfège Tutor for Children with Hearing Disabilities

May 2023 - Present

- Reached out to Hacettepe University Audiology Department, Ankara, Turkey, and asked to support their volunteer activities
- Facilitated weekly solfege tutoring sessions with a group of children with hearing disabilities and guided them on musical
  activities they expressed interest in according to their abilities

## **SKILLS AND INTERESTS**

Language Skills: Fluent English and Turkish, intermediate Spanish

**Computer Skills**: Python, C, C++, Computer-Aided Design (CAD) software (Fusion 360, On Shape)

Interests: Creative writing, playing drums and percussion, piano, licensed tennis player (played for national tournaments),

dance (Formerly ballet and contemporary)