

Rifat Altaş

+90 532 799 96 27

rifaltasrmdnsrgntlzr996@gmail.com

<https://github.com/rrifat996>

Education

City University of Hong Kong (香港城市大學), Bachelor of Engineering - Computer Engineering (February 2024 – June 2024)

- Exchange studies.

Bilkent University, Bachelor of Science – Bachelor of Engineering, Computer Engineering Junior (September 2021 – Present)

Expected Graduation: February 2024. (Shortened to 3.5 academic years)

CGPA: 3.73/4

Comprehensive Scholarship

Technical Projects:

Campus Secondhand Item Website & Mobile App Project | Team Project | September 2023

- Second hand item sell website, using **MERN** stack, still under development.
- Responsible from recommender system modelling, database schema design and ML pipelining.

Lunar Lander Combined Project | [GitHub Link](#) | Individual Resume Project | December 2022

- 3D Deep Q-Learning lunar lander project implemented in **Java**, **Python**, and **GLSL**.

3D Engine | December 2022

- Developed using **OpenGL** and **LWJGL3** in **Java** language.
- .obj file reading, texture mapping & drawing algorithm.

Physics Engine | January 2023

- Implemented using **JOML** in the 3D Engine project.
- **Linear algebra & Physics**

Project Lander | February 2023

- Used **TensorFlow** and **Keras** of **Python** language.
- Reward architecture implemented in the physics engine.
- Works simultaneously with the 3D Engine (implemented in Java) using py4j, they are not compiled at the same time.

Kaggle Competition Solutions | [Kaggle Profile](#) | ML Solutions | January 2023

- **Jupyter Notebooks** written using **pandas** & **scikit-learn** libraries in **Python**.

Euler Fluid Simulation | [GitHub Link](#) | Individual Project | November 2022

- **SFML** project implemented in **C++** language.
- Fluid Physics engine, implemented the referenced [research paper](#).
- **Calculus, ND Calculus:** Vector fields, discrete integration, partial diff. eq. solver, gaussian elimination.

HabitAct | [GitHub Link](#) | CS102 Group Project | June 2022

- Social media application. It was focused on idea of making it easier for people to reach their goals they set by being influenced by each other.
- **Java** project that was developed on the **Android Studio** platform with 4 group members and used Google's **Firestore**.
- Personally developed set of **algorithms** to storage, and real-time organization of data both in cloud database, and in between internal storage units and the database.

Nesibe Aydin Science High School (September 2019 – July 2021)

- Invited with scholarship due to my degrees in nationwide level assessment exams.
- Graduated as the Valedictorian.

Cankaya Anatolian High School (September 2017 – July 2019)**Experience****MATH101 (Calculus) Tutor (September 2023 – January 2024)****Undergraduate Researcher at Bilkent Syslab (October 2023)****Ekinoks Software – Part Time Software Engineer (1 August – 7 October)**

- Developed mathematical GIS analysis algorithms using NASA WWD, JTS tool on Java.
- Implemented algorithms consisted of spherical trigonometry visibility methods, advanced pathfinding algorithms.

Ekinoks Software – Software Engineering Intern (20 June – 21 July)**Licenses & Certifications:****Google Code Jam 2022 Round 1B Competition**[Certificate Link](#)**Coursera - Stanford Algorithms Specialization (August 2022)**Credential ID: QDUK6F46LNJT [Certificate Link](#)**Coursera - Stanford Machine Learning Specialization (January 2023)**Credential ID: JF5YCBJFPWUM [Certificate Link](#)**Languages**

- Turkish (native)
- English (professional working proficiency)
- German (elementary - intermediate)

Interest & Skills**Interest:** Software Engineering, Cloud & HPC, ML & Data, Mathematics.**Technical Skills:** Java, Python, TensorFlow, C/C++, SQL, ML, GPU Programming, OpenGL**Other:** MIPS assembly, (System) Verilog, Digital design.**Accomplishments and Scores****Bilkent University High Honour Student****Bilkent PAE (Proficiency in Academic English) 2022 February Grade A****Bilkent University Computer Science Comprehensive Scholarship****University Exam Degree**

- Ranked 180th among 2.6 million students in the university entrance exam (YKS) in Turkey.