

JUNE 2022



TechnoMinds

Sancaktepe Teknoloji Anadolu Imam Hatip Lisesi - Yabancı Dil Kulübü

EDITOR'S

Dear precious readers.

As you all know humans have a passion to write and read since the ancient times. They either tried to write on hard rocks or tablets. They did those things to explain themselves to their contemporaries and future generations. Since then, this passion has not changed much. We still want to write something to explain ourselves. This magazine of our school's is produced just because of that need. Our students are the main contributors of this masterpiece. We, the teachers and management, just tried to lighten their paths. We hope you will have a good time while reading this magazine.

Yours sincerely.

Technominds

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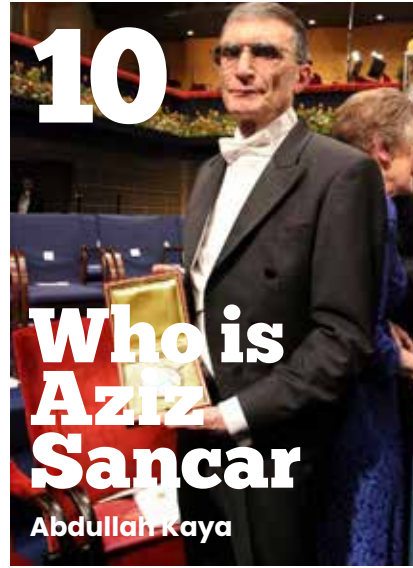
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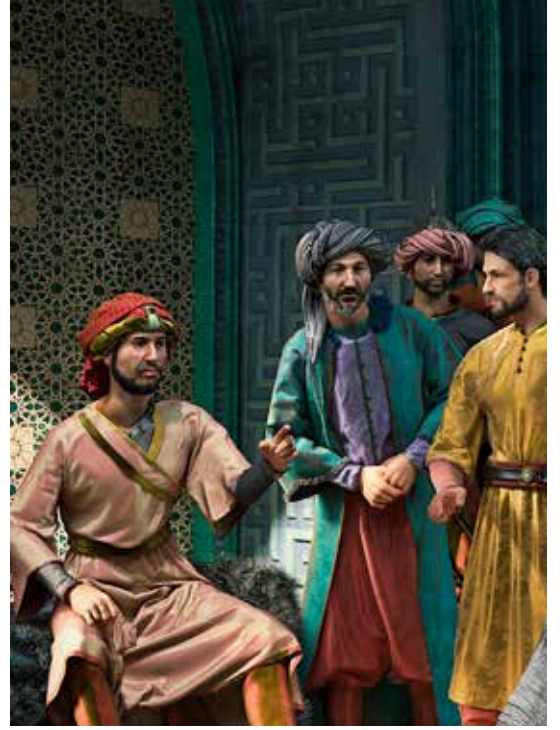
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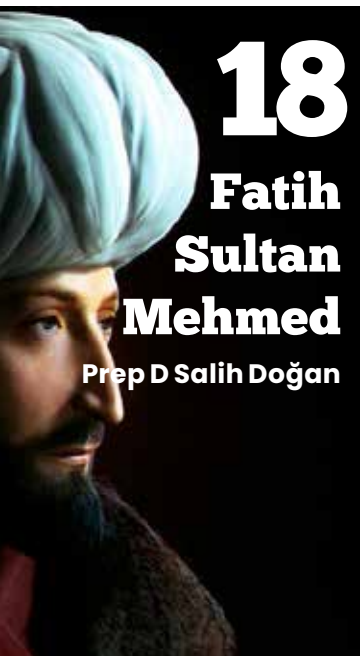
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Abdülaziz DUMAN School Principal

DEAR FRIENDS.

As Technology Anatolian Imam Hatip High School, we work with all our stakeholders to go one step further every day with the aim of providing quality education opportunities to its students, preparing them for life and the future, and responding to our country's need for trained people in the field of technology.

The Science and Technology project is being implemented in our school, which started to serve within the framework of the program diversity of the General Directorate of Religious Education. In addition, we diversify our activities so that our students can grow up as biplanes and serve our nation, ummah and humanity.

Today, we strive to teach English, which has become the world language and is also the language of technology.

Both mobile applications in our curriculum, web-based application development, computer graphic design, robotics and coding etc. we try to train our students in the best way in the field of technology in our weekend technology workshops such as photoshop, electronic coding, artificial intelligence, 3d design and production.

We work so that our students can grow up with national and spiritual values, and receive their religious education in the best way and from the most accurate source. Consciousness

seminars, personality development programs, hadith memorization competitions, catechism competitions, litigation and consciousness studies are some of the studies we have done in this field. Our students lead the time and Friday prayers in our school mosque. We are preparing the opportunity for our students to grow up as individuals with identity, personality, character, and pioneer generations, equipped with the basic values of our civilization, adopting the teaching of imam hatip.

Reading groups, club activities, instrument courses, etc. are organized for our students to have a good rest in an intensive education environment, to increase

Our Technominds Magazine is a magazine: Technominds is a work prepared by our students in English. They read, they researched, they wrote.

their speaking skills in front of the community and to improve their personal skills. We organize courses in the fields. City and out-of-town excursions and nature camps are among our indispensables. Our students participate in activities such as basketball, volleyball, table tennis and taekwondo in our gym.

We contribute to the academic notions of our students with our qualified teaching staff. We pay special attention to each of our lessons. We are making preparations so that our students can go to the best university in the field they want at the end of their 5 years at our school.

Among all these works, we put our reading and writing activities in a separate place. We read,

we write, we print. Our students support our journals published in different fields with their articles and works. This work that you hold in your hands is the result of these efforts.

Our Technominds Magazine is a magazine prepared by our students in English. They read, they researched, they wrote.

On this occasion, we sincerely thank to Sancaktepe District Governor, Ahmet KARAKAYA, Sancaktepe Mayor, Şeyma DÖĞÜCÜ, District Director of National Education, Hale Bağçe ÖZBAŞ, Deputy Mayor, Emine Çınar Açıkalın on behalf of our school, students and parents.

To our Chairman of the Advisory Board, Mr. Ahmet AKÇA, who did not spare his valuable sup-

port for the education of our students, and to our Advisory Board members, Prof. Dr. Bahadır TUNABOYLU to our teacher, Assoc. Dr. Muhammet GARIP to our teacher, Dr. I would like to express my gratitude to our teacher Ertuğrul ÇETİNSOY and to all the members of the school family union in the presence of our President Hayrullah ÖZTÜRK.

I congratulate our students who contributed to the preparation of this magazine with their pen, heart and effort, our Deputy Principal Mehmet ASAĞ, who guided the students for the publication of the magazine and made great efforts, our English Coordinator Fatih ŞEN and our English Teacher Mustafa GÖK, our Foreign Language Club, and I wish our work to be fruitful.

ABOUT OUR SCHOOL



THERE IS AN ENGLISH PREPARATORY CLASS IN OUR SCHOOL.

As a result of the program diversity studies of the General Directorate of Religious Education, Sancaktepe Technology Anatolian Imam Hatip High School started its service in 2020 as Turkey's first technology project imam hatip high school.

As a result of the program diversity studies of the General Directorate of Religious Education, Sancaktepe Technology Anatolian Imam Hatip High School started education with 90 students in the 2020-2021 academic year, with 60 students in the 2021-2022 academic year, as Turkey's first Technology Project Imam Hatip High school. There is an English preparatory class in our school. For a qualified education, it continues its education and training services with its fully equipped educational environments and quality academic staff.





VISION

With its quality of education, commitment to traditions and originality, strong academic staff, education programs open to development, innovative teaching system, it enables all students to be well educated both technologically and academically, is ready for the digital age, can contribute to the national technology move of our country, and also the knowledge gained with the higher education it has prepared itself. To be a pioneering and ideal educational institution that creates opportunities for individuals to be sought after and preferred with their talent, experience, strong personality and morals.



MISSION

Having the knowledge and cultural accumulation of the new world, recognizing and adopting its own civilization values, contributing to universal values, thinking critically as well as innovative, open to development and entrepreneurial, using technology in a manner befitting human dignity, producing solutions to the common problems of all humanity, adding value to life, technology We exist to raise generations that can combine knowledge and wisdom in the same body.



Our aim in Anatolian Imam Hatip High Schools

To give a religious education and training that takes the Qur'an and the Sunnah, which are the two main sources of the Islamic religion, as a reference.

To contribute to the training of individuals with high self-confidence who have acquired foreign language skills, know different races and cultures, have the knowledge and culture to compete with their peers at the international level, and communicate with the world and Muslim societies.

To enable students to take part in scientific, professional, cultural, artistic and sports fields at local,

national and international levels in order to contribute to their academic, professional, social and cultural development according to their interests and abilities.

To raise young people who know their history, protect their cultural heritage, protect the values of our civilization, think, research, interpret, question, constructive, productive, and follow the path of knowledge and wisdom.

To prepare well-behaved students for life who depend on national and spiritual values, have the ideal of being useful to humanity and have character.

WHO IS

AZIZ SANCAR

Translated By
ABDULLAH KAYA



He was born in 1946 in the Savur district of Mardin, the seventh of eight children of a middle-income farmer family. He completed his primary, secondary and high school education in Mardin. He was interested in football during his high school

years, but in his last year he gave up being a football player and went to Istanbul to continue his higher education. He graduated from Istanbul University Faculty of Medicine, which he entered in 1963, with first place in 1969. After working as a

physician in a health center in Savur for two years, he went first to Johns Hopkins University and then to the University of Texas at Dallas with a NATO-TUBITAK scholarship.

He studied biochemistry for a few years in the USA, where he went with a TÜBİTAK scholarship, but due to some social adaptation problems, he returned to his homeland and worked as a doctor for a while in his hometown Savur. However, his heart was still in scientific studies. Therefore, he went back to the USA and started his doctorate in molecular biology at the University of Texas at Dallas. Aziz Sancar, who continued his post-doctoral research at Yale University, made very important discoveries here. Due to these achievements, he received an offer from the University of North Carolina at Chapel Hill in the USA.

Since 1997, he has been a Professor of Biochemistry and Biophysics in the Sarah Graham Kenan Program at the University of North Carolina in the United States of America. He is a member of the National Academy of Sciences in the USA and the American Academy of Arts and Sciences, Turkish Academy of Sciences. He received an award from the Vehbi Koç Foundation in 2007. He lives in Chapel Hill with his wife, Gwen Sancar. Aziz Sancar and Gwen Sancar are among the founders of the Turkish House in Carolina.

The terms for the enzyme “excinuclease/excision nuclease”, which Aziz Sancar invented and named after the “maxicell” technique, entered the Oxford Dictionary of Biochemistry and Molecular Biology. He is recognized as the first American Turk to be elected to the National Academy of Sciences. He won the 2015 Nobel Prize in Chemistry for his research mapping how cells repair damaged DNA and preserve genetic information.

Prof. Sancar is currently the Sarah Graham Kenan Professor of Biochemistry and Biophysics at the University of North Carolina School of Medicine. Sancar, who has more than three hundred scientific articles, gained worldwide fame especially with his studies on DNA repair and regulation of the biological clock.

However, his heart was still in scientific studies. Therefore, he went back to the USA and started his doctorate in molecular biology at the University of Texas at Dallas.



Cezeri

Translated By
ÖMER SALİH ORTAK

Cezerî (1136, Cizre - 1206, Cizre) or Ismail bin er-Rezzaz al-Cezerî (Arabic: اسماعيل بن الرزاز الجزري) is a Muslim scholar, inventor and engineer from Cizre who works in the "Golden Age of Islam". It is thought that Cezerî, who took the first steps in cybernetics and made and operated the first robot, was an inspiration to the famous artist Leonardo da Vinci.

Considered the greatest genius of cybernetics, physicist, robot and matrix master Cezerî was born in Cizre and died there. This scientist, who lived in the Cizre and Diyarbakir regions and has a very important place in the world literature, described about 50 mechanical devices and instructions on how to build them. Among these, he is mostly known for his invention of the "elephant water clock".





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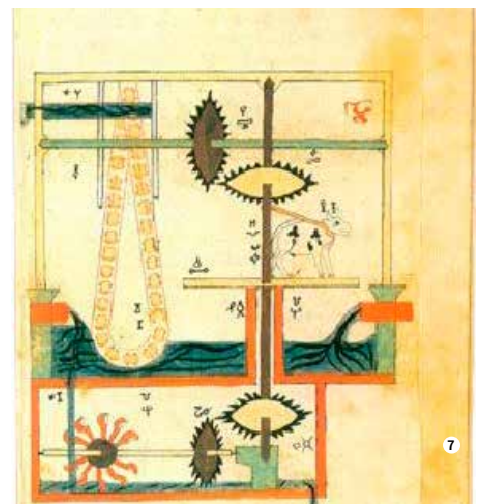


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HIS LIFE

He was born in 1136 in the Tor neighborhood of Cizre. Al-Jazari, who got his nickname from the city he lived in, completed his education at Camia Madrasa, concentrated on physics and mechanics, and made many firsts and inventions.

In the western literature, Although it is stated that a steam-powered pigeon was made by the Greek mathematician Archytas around 300 BC, the earliest known written record of robotics belongs to Cezeri.



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HIS WORKS AND WORKING PRINCIPLES

- ❶ ABDEST Vending Machin
- ❷ Elephant Water Clock
- ❸ Oil Lamp Clock
- ❹ Automatic Water Machine
- ❺ Saz Playing Robot
- ❻ Table Machine
- ❼ Pomp Vending Machine

Translated By
MUHAMMED SAMED ÖZEN

The Life Of Famous **MATHEMATICIAN**

ALI KUSCU

“

The birth place and time of Kuşçu, whose real name is "Alaeddin Ali", is not known exactly, but it is rumored that he was born in Samarkand in the early 15th century.

We will try to talk about the life of the Turkish astronomer, mathematician and linguist Ali Kuşçu, who was invited to Istanbul by the Ottoman Sultan Mehmet the Conqueror, who attached great importance to science. Ali Kuscu was appointed as a professor at the Hagia Sophia Madrasah. He added color and vitality to the studies in the fields of astronomy and mathematics in Istanbul.

The birth place and time of Kuşçu, whose real name is "Alaeddin Ali", is not known exactly, but it is rumored that he was born in Samarkand in the early 15th century. It is thought that Kuşçu's father, Muhammed, who received

his religious and scientific education in Samarkand, was Uluğ Bey's chief falconist, and therefore his nicknames were "Kuşçu". Kuşçu, who was raised in Samarkand during the Timurid period, received mathematics and astronomy education from Bursalı Kadızade-i Rumi, Giyaseddin Cemşid and Uluğ Bey after his education there. Kuşçu, who wrote his work Şerh-i Tercid during his stay in Kirman, presented it to Ebu Said Han. As a result of the lessons he took from the scholars, Kuşçu, who wrote a treatise called "Hallü'l-Eşkâl-i'l-Kamer", which he wrote as a thesis and describing the shapes of the moon, later returned to

Uluğ Bey. Kuşçu, who presented his treatise on the states of the moon to Uluğ Bey, won the appreciation of his teacher. After the death of Kadızade-i Rumi, the director of the Samarkand Observatory, Kuşçu became the head of the observatory and helped complete the book "Zic-i Uluğ Bey" written by Uluğ Bey. Ali Kuşçu, who was sent to China by Uluğ Bey, wrote a work during this visit. Kuşçu, who was deeply saddened by the murder of Uluğ Bey by his son, left Samarkand and went to Tabriz under the pretext of pilgrimage. While Kuşçu was respected and valued by the Akkoyunlu Ruler Uzun Hasan, he was offered an embassy to come between Fatih Sultan Mehmet and Uzun Hasan. Kuşçu, who accepted Uzun Hasan's offer, came to Istanbul with his delegation. Kuşçu, whose knowledge and knowledge attracted the attention of Fatih, was persuaded by the Sultan to stay in Istanbul. Returning to Tabriz to complete his embassy duty, Kuşçu set out for Istanbul in 1472 with the consent of Uzun Hasan.

It is rumored that when it was learned that Kuşçu had come to Istanbul, Fatih had equipped a galley to welcome him and sent a group of scholars to him. Mehmet the Conqueror appointed Ali Kuşçu, whom he took with him during his campaign against Uzun Hasan in 1473, to the Hagia Sophia Madrasa. It is known that even scientists fol-

lowed the lectures of Ali Kuşçu, who added excitement to the studies in the fields of astronomy and mathematics in Istanbul. Kuşçu produced works not only in the fields of astronomy and mathematics, but also in the fields of kalam and philosophy.



HE MEASURED THE LATITUDE OF ISTANBUL

On the other hand, it is rumored that Ali Kuşçu was assigned to organize the program of Semaniye Madrasahs together with Molla Hüsrev during the reign of Fatih Sultan Mehmet. It is known that Ali Kuşçu corrected the longitude value of Istanbul, which was determined as 60 degrees, and determined its latitude as 59 degrees and 41 degrees 14 minutes. There is also a sundial that he made in Fatih Mosque. Ali Kuşçu, who died on December 16, 1474 in Istanbul, was buried around Eyüp Sultan Tomb. Among the students raised by Kuşçu are his grandson Mirim Çelebi and Molla Lutfi.



MATHEMATICS WORKS

Ali Kuşçu, whose studies have developed in the direction of theology, grammar, mathematics and astronomy, has two important works written in the field of astronomy and mathematics. One of them is the astronomy book called "Fethiye" because it was finished during the Otlukbeli War and presented to Fatih after the victory. In the first chapter, the spheres of the planets are discussed and the movements of the planets are mentioned; the second part is about the shape of the earth and the seven climates. In the last part, Ali Kuşçu discussed the measurements of the earth and the distances of the planets. This astronomy work, which was very active in its period, was written for teaching astronomy in madrasahs rather than revealing new findings. Another important work of Ali Kuşçu is the mathematics book he named "Muhammediye" after Fatih.

Translated By
AHMET MIRAÇ CANPOLAT

Khwarizmi

Harizmi (Persian: خوارزمی), or with his full name Abu Ja'fer Muhammed bin Mūsā al-Kharizmi, (b. 780, Khwarezm - d. 850, Baghdad), Persian scientist who worked in the fields of mathematics, astronomy, geography and algorithm, 780 He was born in Khwarezm, in the city of Khiva. He died in Baghdad in 850. In fact what is known for certain about the life of al-Khwarizmi is limited. He was born in Khwarezm city of Greater Khorasan (modern Khiva, Khwarezm region, Uzbekistan) in an Iranian family. Although it is mentioned in some sources that he was born in 780, this is not certain.

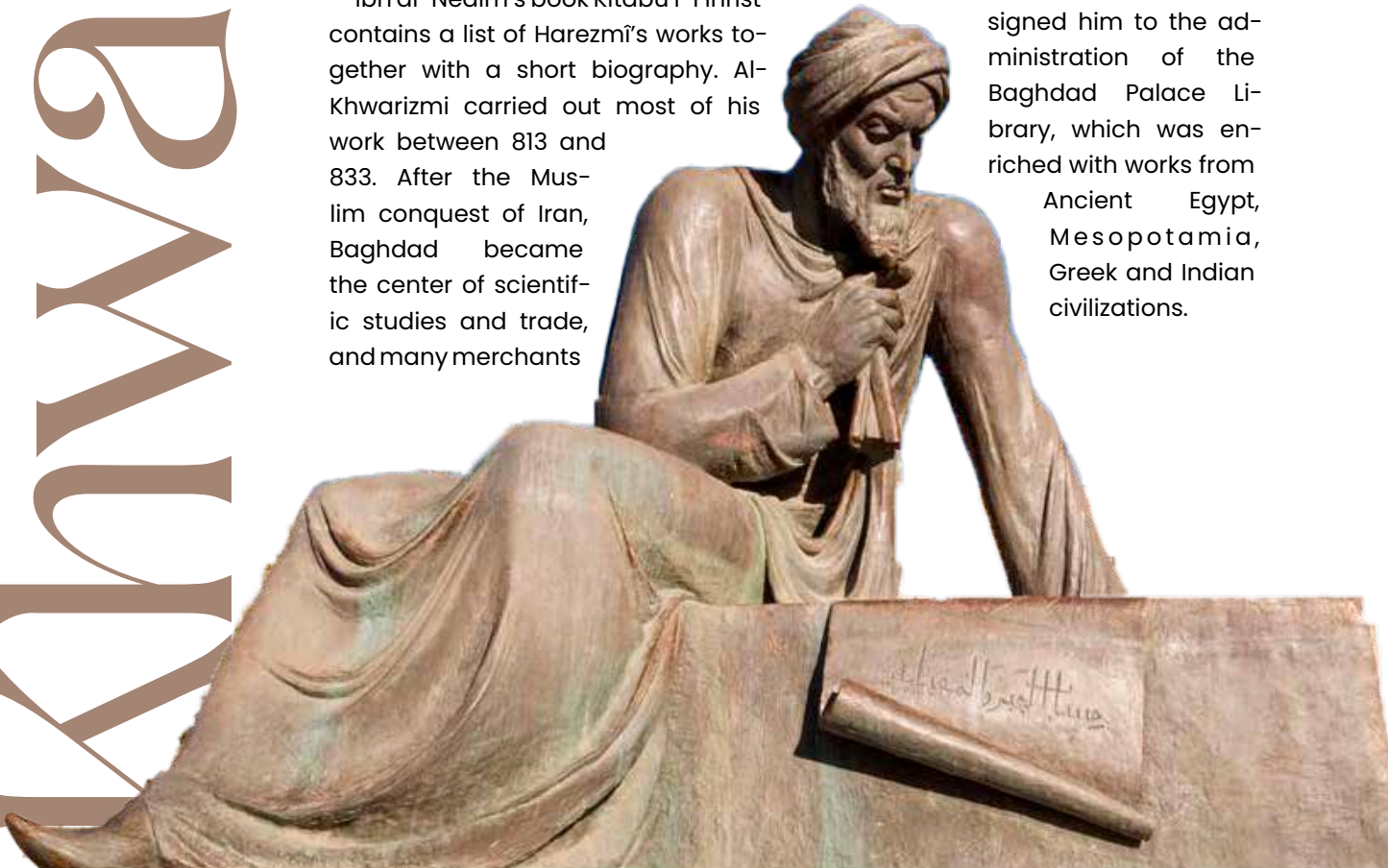
Muhammad ibn al-Tabari gives him his name as Muhammad ibn Musa al-Khorezmi al-Qurtubawi. On the other hand, the title Cordobali in his name indicates that he may have come from Cordoba, a viticulture region in Baghdad.

Ibn al-Nedim's book Kitābu'l-Fihrist contains a list of Harezmi's works together with a short biography. Al-Khwarizmi carried out most of his work between 813 and 833. After the Muslim conquest of Iran, Baghdad became the center of scientific studies and trade, and many merchants

such as Khwarezmi. As a scientist at the House of Wisdom built in Baghdad by the Caliph Al-Ma'mūn, Khwarazmi worked in the fields of science and mathematics, including the translation of scientific manuscripts in Greek and Sanskrit. Douglas Morton Dunlop is of the opinion that Khwarezmi may in fact be the same person as Mu'ammad ibn Musa ibn Shakir, the eldest of the three Bani Musas.

Harezmi, who received his basic education in Khwarezm in the Khorasan region, learns about the existence of an atmosphere of advanced science in Baghdad in the early years of his youth. Harezmi, who is interested in scientific subjects, comes and settles in Baghdad to realize his ideal of working on these subjects. When the Abbasid caliph Me'mūn, who was famous for his patronage of scholars in his time, became aware of his knowl-

edge in Harezmi, he assigned him to the administration of the Baghdad Palace Library, which was enriched with works from Ancient Egypt, Mesopotamia, Greek and Indian civilizations.



His WORKS

Al-Khwarizmi's contribution to mathematics, geography, astronomy and cartography; laid the foundation for innovation in algebra and trigonometry. The title of his book, which led to the emergence of algebra with its systematic approach to solving linear and quadratic equations, is "Concise Book on Completion and Balancing and Calculation".

The book titled "On Calculation with Indian Numerals", written by Khwarezmi in 820, is the main reason for the spread of the Indo-Arabic numeral system to the Middle East and Europe. Translated into Latin as "Algorithmi de numero Indorum". Some of his work is based on Persian and Babylonian astronomy, Indian numbers and Greek mathematics. Khwarazmi systematized and corrected Ptolemy's data on Africa and the Middle East.

Another important book, "Kitab-ı Süret'ül-Ard" (The View of the World), was translated as Geography. Based on the coordinates of the places in Ptolemy's

Geography, he developed and presented the existing values for the Mediterranean, Asia and Africa. He accompanied some 70 geographers who were commissioned by the Caliph al-Ma'mûn to determine the circumference of the world and to prepare a world map.

It had a profound impact on the development of mathematics in Europe, with the spread of his works to Europe through Latin translations in the 12th century.

Mukabele is the first work in the history of mathematics that includes systematic solutions of first and second degree equations. For this reason, Harezmi is also known as the "Father of Algebra" (with Diophantus). The word "algebra" in English and its Turkish equivalent of "cebiri" comes from "al-cebr", one of the methods of solving quadratic equations in Harezmi's book.

Harezmi is the first person known to have used the numeral zero (0) and the unknown x .

He provided a comprehensive account of solving polynomial equations of the second degree and discussed the basic methods of "reduction" and "balancing", referring to transferring terms to the other side of an equation, that is, canceling like terms on opposite sides of the equation.

Al-Khwarizmi's method of solving linear and quadratic equations begins by reducing the equation to one of six standard forms.

- Equating squares to roots ($ax^2 = bx$)
- Equalization of squares to number ($ax^2 = c$)
- Equating roots to numbers ($bx = c$)
- Equalization of squares and roots to numbers ($ax^2 + bx = c$)
- Equalization of squares and roots ($ax^2 + c = bx$)
- Equating roots and squares ($bx + c = ax^2$)

Works on mathematics

- Al-Kitab'ül Muhtasar fi'l Hesâbi'l Cebri ve'l-Mukabele
- Kitâbü'l-Muhtasar fi'l Hisâbü'l-Hind
- Al-Mesahat

Works on geography

- Kitâb-i Süretü'l-Ard

His works on history

- Kitab al-History

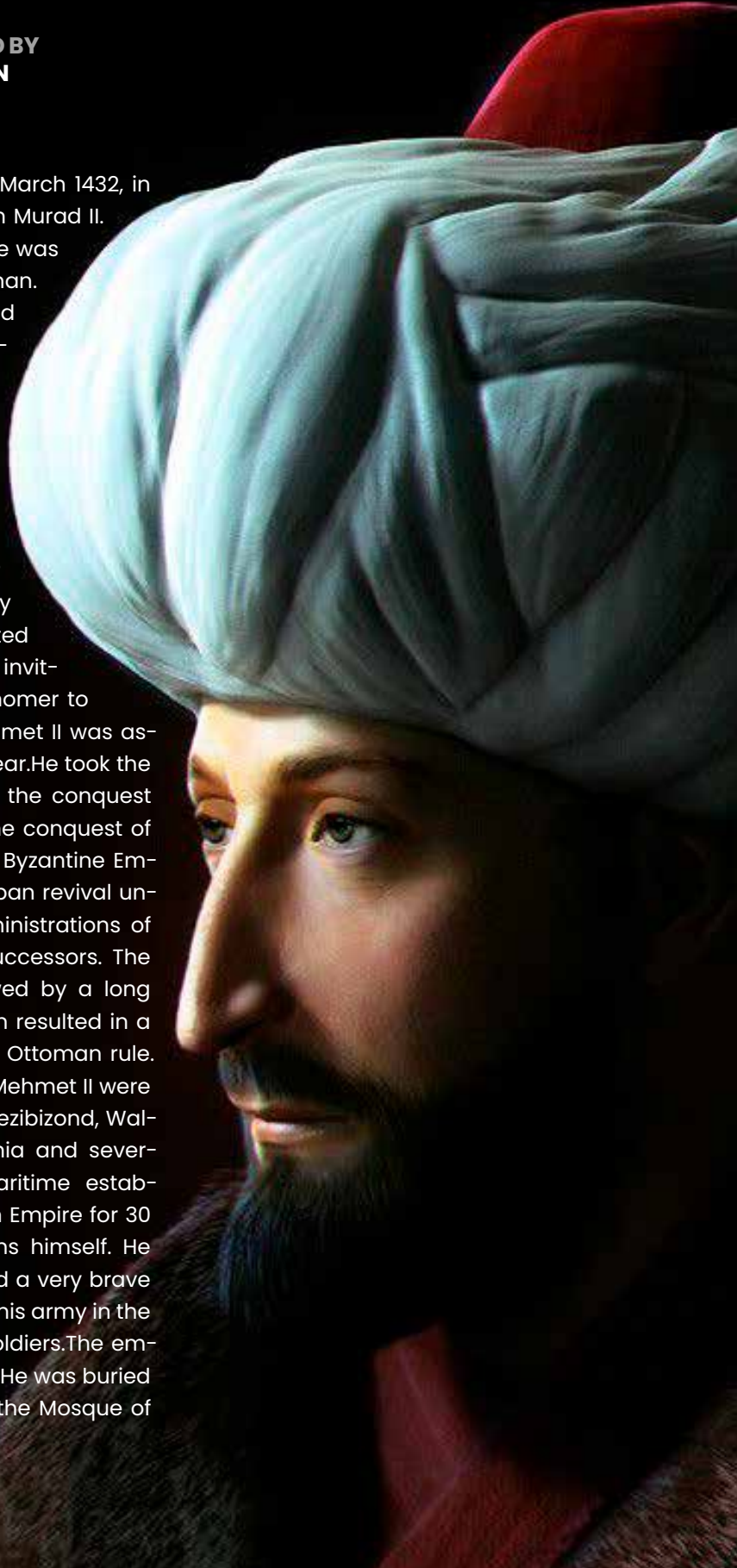
Works on astronomy

- Kitâbü'l-'Amâl bi'l Usturlab
- Kitâbü'l Ruhnâme

FATİH SULTAN MEHMET

TRANSLATED BY
SALIH DOĞAN

Mehmet II was born on 29th March 1432, in Edirne. He was the son of Sultan Murad II. His mother was Huma Hatun. He was a tall, strong and muscular man. Mehmet II was a statesman and a military leader. He was also interested in literature, fine arts and monumental architecture. He was educated by famous scholar Aksemseddin. Mehmet was speaking seven languages fluently. Another worthy tribute to the Ottoman ruler is the famous portrait of him by Gentile Bellini. He also interested in philosophy and science. He invited Ali Kuscu the famous astronomer to the observatory in Istanbul. Mehmet II was ascended the throne in his 20th year. He took the name "conqueror" (fatih) after the conquest of Istanbul on 29th May 1453. The conquest of Istanbul spelled the end of the Byzantine Empire and entered a phase of urban revival under the wise and tolerant administrations of Mehmet and his immediate successors. The capture of Istanbul was followed by a long succession of campaigns which resulted in a tremendous extension of direct Ottoman rule. Among those areas that fell to Mehmet II were Serbia, Greece, the Empire of Trebizond, Wallachia, Bosnia, Karaman, Albania and several Venetian and Genoese maritime establishments. He ruled the Ottoman Empire for 30 years and joined 25 campaigns himself. He was a very strict statesman and a very brave soldier. He took place in front of his army in the wars and he encouraged his soldiers. The emperor had died on 3rd May 1481. He was buried in "Fatih Turbesi" (tomb), near the Mosque of Fatih in Istanbul.



Sultan Baybars is a Kipchak Turk who was born in 1233 in the north of the Black Sea. He was taken prisoner by the Mongols when he was about fourteen.

He was taken to Damascus as a captive and sold in the slave market there. Baybars was taken by one of the mamelukes of the Ayyubid sultan Salih Ayyub.

After that Salih Ayyub noticed his intelligence in 1246, he was sent to the barracks to receive military training. He took part in the army in a few conflicts with the Crusaders, and was promoted to the emirate in a short time.

The Mamluks, the state of Baybars, entered the history of Islam as the only state that could defeat the Mongols.

**TRANSLATED BY
MUSTAFA KAYRA KAYA**

SULTAN BAYBARS

Before the Mongols met the Mamluks, the Harzemshahs had defeated the great Turkish-Islamic states such as the Anatolian Selcuk State. Baybars defeated the Mongols at Ayn Golut in 1260 and largely stopped his enemy's advance. After the Battle of Ayn Golut, Sultan Kutuz He did not give Baybars the governorship of Aleppo he promised.

After this incident, Baibars had Kutuz killed during a hunt. While the Sultan was dying, he declared Baybars the sultan. Baybars, in the first year of his reign (1261), He replaced the Abbasid caliph, who was killed by the Mongols, by another of the same family, and established the Abbasid Caliphate of Egypt. During the time of Baybars, the Egyptian Turkish State experienced its strongest period.

Showing that he was a brave soldier, a mighty ruler and a good administrator, Baybars fought against the Crusaders and Mongols throughout his life.

TRANSLATED BY
FATİH DOĞAN

Wrestler, world oil wrestling champion (B. 1856, Shumen / Bulgaria - D. July 4th, 1898, Atlantic Ocean). Yusuf, who was one of the legendary names of wrestling, gained the name "Koca (Big)" with his 154 kg body, wrestling skills, strength and morality. He was given the name "Koca" later by the philosopher Rıza Tevfik.

Koca Yusuf started wrestling in his young ages as an apprentice of Nasuhçulu Kel İsmail Pehlivan, was one of the well-known wrestlers of the time. He wrestled with Kel Aliço, who was the Kırkpınar wrestling champion for years. He beat Adalı Halil successively for two times. He participated in several wrestling tournaments in Sultan Abdülaziz, Sultan V. Murat and Sultan II. Abdülhamit periods.

He went to Europe in 1897 and learned the rules of mat wrestling in Paris. He beat all significant wrestlers of the time including Olsen, Pons, Fournier and Sebes. After having earned reputation in Europe, he got an invitation from USA and went there. He won all the competitions he participated. He also beat the famous Jenkins and the USA champion Robert. Robert had boasted against an audience of almost 20 thousand people saying "I'm gonna knock this Turk down!" However, while wrestling, Koca Yusuf threw Robert outside the mat and Robert could not dare to return back. Koca Yusuf was named as "The Terrible Turk" for being unbeaten and his grandeur.

Koca Yusuf set off with La Bourgogne transatlantic having a French flag on May 21st, 1898 to return back to Turkey. The ship collided with Crmartyshire cargo carrier having an Irish flag in the morning of July 4th, 60 miles offshore near Sable Island in the northeast of New York, and sunk. He got drowned together with all the passengers and crew. His body was lost in the Atlantic Ocean. A tragic event took place on



KOCA YUSUF

the ship. Koca Yusuf was trying to get onto a metal piece when the passenger on the metal piece started hitting him with sticks, having thought that they would get drowned if he got on the metal piece. Seeing that it did not work, one of the passengers cut Koca Yusuf's hands with an axe, letting him get drowned in the Atlantic Ocean.

His name was given to a 40 ton floating crane which is now at the Haliç Dockyard under the control of Turkey Maritime Organization.



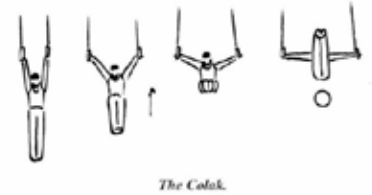
TRANSLATED BY
MUHAMMET BURAK KARA

IBRAHİM ÇOLAK

Ibrahim Çolak was born on January 7, 1995 in İzmir. He graduated from Ege University Physical Education and Sports Teaching Department. He started gymnastics at the age of five. Ibrahim Çolak won bronze in Trabzon 2011 European Youth Olympic Summer Festival, silver in Mersin 2013 Mediterranean Games, bronze in Baku 2015 European Games, gold in Baku 2017 Islamic Solidarity Games, gold in Tarragona 2018 Mediterranean Games and finally in 2019 won the gold medal at the Artistic Gymnastics World Cham-

pionships. Ibrahim Çolak became the first Turkish athlete to win the world championship in gymnastics in the senior category with the gold medal he won at the 2019 World Championships. Ibrahim Çolak was also included in the literature with his surname by the International Gymnastics Federation (FIG) for his action in the ring branch at the Australian World Cup held in 2017. He also became a source of pride for Turkish sports with his movement called "The Colak".

Name awarded: The Colak



Tokyo placed fifth in the final stage in 2022. Link in here.

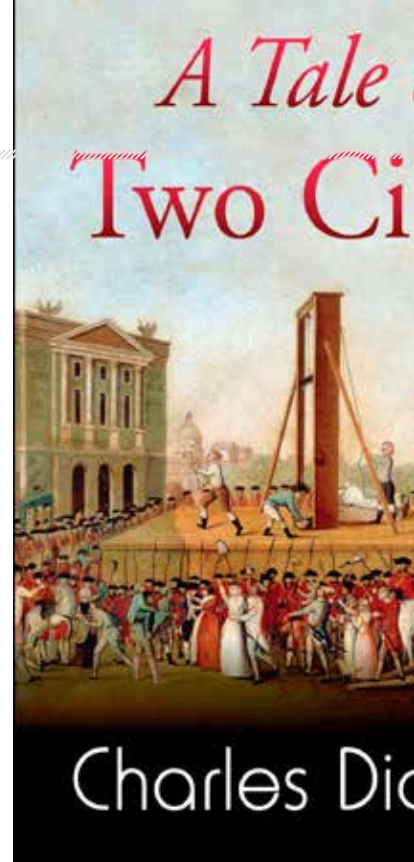
<https://www.youtube.com/watch?v=wo0AAcmtVQo>

What is ring gymnastic?:

The rings, also known as steady rings or still rings (in contrast to flying rings), is an artistic gymnastics apparatus and the event that uses it. It is traditionally used only by male gymnasts, due to its extreme upper body strength requirements. Gymnasts typically wear ring grips while performing on the rings.

WRITTEN BY
M. AZAM ASLAN

TRANSLATED BY
MUSTAFA CEVAHIR



A Tale Of Two Cities Novel Review

A Tale of Two Cities, is a novel written by Charles Dickens in 1859 to be serialized in newspapers and set in Paris and London during and before the French Revolution. With sales of over 200 million copies, it is among the most famous literary works of all time.

Author Charles Dickens, with his full name Charles John Huffam Dickens, lived between the years of 1812 and 1870. He is known as The Most Popular Author in the Era of Victoria. The most beloved part of him is the characters in most of his novels, which are chosen and adapted from real life, especially from the author's own life.

In the novel of A Tale Of Two Cities, the characters used by the au-

thor are in the foreground as well. One of the most prominent characters in the novel, Charles Darnay is showing us the background of French revolution. While Miss Pross is representing a noble British Lady and Mr. Lorry, a classic businessman. The fact that all the characters in the background in the novel are people that we can easily encounter in daily life such as Mr. Lorry and Mr. Stryver, also directly affected the sales of the book.

One of the main reasons of the big success of this novel may be interpretable of the parts from the novel which really taken from author's own life. We all can see an example of this situation in the part which Doctor Manette was engaged in shoe making during imprisonment

of her can be associated with the author leaving school at the age of 12 to work in a boot-painting factory.

In this novel, the author has vividly described the period he witnessed and the effects that were clearly visible after the period of French Revolution. The European writer did not only define Europe of his time as the enlightenment and modernization that most of the books describe like, but also talked about the events that took place in the background during this period. At the same time, the author was able to explain being a nationalist from all sides and to tell the prevailing understanding of nationalism at that period.



Author Charles Dickens, with his full name Charles John Huffam Dickens, lived between the years of 1812 and 1870. He is known as The Most Popular Author in the Era of Victoria. The most beloved part of him is the characters in most of his novels, which are chosen and adapted from real life, especially from the author's own life.

The two cities that are the subject of the novel are the capitals of Great Britain and France, the superpowers of the 1800s, London and Paris. While London is the symbol of modernity, Paris represents the extreme misery, hunger, and the worst situation experienced in Europe due to the collapse of the kingdom and rebellions. The misery, made the people of Paris, make their babies drink the drinks which were scattered on the roads as holy water. Another miserable situation experienced in Paris is that the people applaud the people they killed in order to create a whole new country.

All things aside, if we need to talk about the continuity of the novel, I am sure that even when the read-

ers are tired, they will not be able to put the book down. Since the events in the book are told right on the point without too much detail, the reader does not get bored.

The fact that there are too many characters in the novel and that these people are sometimes called by their names or surnames, as well as the pasts of these characters and their connection with each other, can confuse the reader. But in the upcoming pages, after everything solved, novel becomes a real page turner.

The character that impressed me the most in the novel is Mr. Sydney. Although this man is a very smart and talented lawyer, we are faced with his negative at-

titude towards life and his closest friend's betrayal to him. His cleverness is highlighted a second time, as he himself has saved Mr. Darnay's life twice.

The novel also has a movie adapted from it with a very little modification. When you watch the movie, it's almost like you've read the book.

To sum up, this novel is author's observation of the complexity of the period in which he lived, the events, and people that was in his life and transfers them to the readers fluently. I strongly suggest this novel to the readers who love to read immersive books.

MARS

TRANSLATED BY
ABDULLAH MUNIR SAHIN

Mars, or the “Red Planet” with its other name. The 4th and most earth-like planet in our solar system. The reason why it is called Mars is because it is dedicated to MARS, the god of war in Roman mythology.

The reason why it looks red when viewed from the outside is because there is too much iron oxide on its surface. Mars has 2 small moons. Their names are Phobos and Deimos. How they formed or how long they have been orbiting Mars is unknown.

Mars is home to the largest mountain (MOUNT OLYMPO) and the largest valley (Marineris Valley) in the solar system. There are also some traces indicating that there were water beds on Mars in the past.

Salt water remains were found at

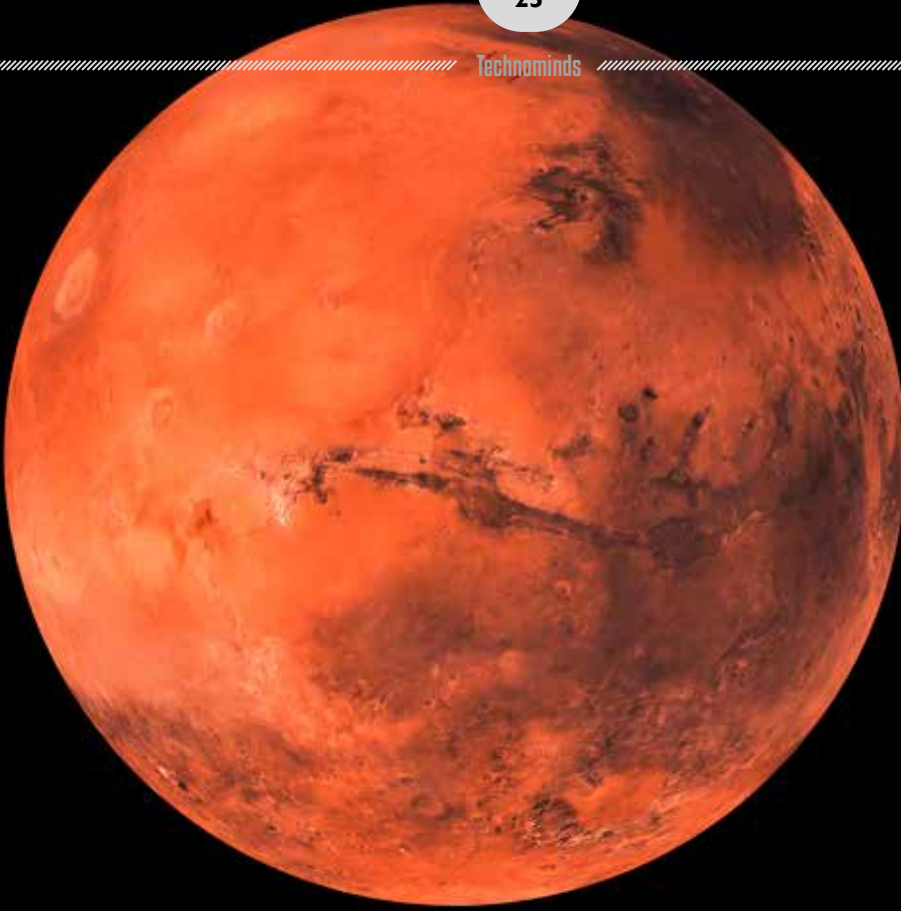
the foot of some mountains. Even frozen water can be found in some parts of Mars. It takes approximately one Earth day for Mars to complete its rotation. A day on Mars lasts 24.6 hours, whereas a Martian year corresponds to 687 Earth days.

Although Mars is seen as the most livable planet after Earth in the solar system, the differences between these two planets are very important for life. For example; Atmospheric pressure on Mars is only a fraction of that on Earth. (An average of 7.5 millibars on Mars is over 1000 on Earth.) The average surface temperature on Mars is -63°C , much lower compared to Earth's average surface temperature of 14°C .

Now some of you may think of “How can one live?” The question is

stuck. Scientists have developed a scale. “Habitable Zone” means “Livable zone”. This habitable zone around the Sun starts at a distance of about 110–120 million kilometers from the Sun and extends to a distance of 230–250 million kilometers. Depending on the mass and atmosphere density of the planet that will be located in this region, this distance may increase or decrease a little more. In our solar system, Venus, Earth and Mars enter this region. Of course, it is progressing in this region. Namely; In every era, our world is going to go out of habitable scale. Of course, this is something that can happen in a very long time.

Scientists calculated the gravity of Mars based on Newton's Theory of Universal Gravity, which states that the gravitational force exerted by an object is proportional to its



mass. These proportions can be expressed by the formula $g = m / r^2$. Based on this, we can say that the gravity of the Earth is 3 times greater than that of Mars.

Mars is the planet most likely to have life after Earth in the solar system. Current research also points to this. Many exploration robots sent to space are sent to the colony planned to be created on Mars. In fact, in New York, items for the colony on Mars began to be 3D printed. Leading people of the world, including Elon Musk, are also making serious investments in this regard.

Mars has not only been a representative of science and objectivity, but has also been the subject of fortune-telling art like astrology in ancient times. Mars in astrology; It represented things like war, strength, courage. That's why in

ancient times the Greeks named him Mars, the god of war. He was seen as a more virtuous figure by the Romans than by the Greeks.

Important war-related festivals were held in his honor as the protector of Rome and the Roman way of life, and the defender of city borders and borders. In fact, according to ancient beliefs, the man came from Mars and the woman came from Venus. The reason for this is that while Mars is associated with such things as war, heroism and courage, Venus is associated with things such as love, loving and happiness.

The name of the Red Planet in eastern culture is "Mirrih" or "Merih" and it is the seventh planet. It was believed that those born under the influence of this fortune or sign would be sociable, brave, resilient, warlike or cruel, selfish and hasty.

This planet, which is also encountered in Turks, finds a place for itself in Turkish poetry. In Divan poetry, he is mostly mentioned with the Persian mythology hero Behram.

I am that Mirrih siphir-i mihna,
who is süz-i dil

Good luck with my iktiran appearance

With his couplet, he found a place for himself in the verses of Galib of Leskofça.

Mars has been at the forefront of many scientific and non-scientific issues. The mystery of the Red Planet is still not fully solved. But it has always been at the forefront throughout the history of mankind and it seems that it will continue to be so.

1

TRANSLATED BY
FURKAN KERIM ARIKAN

Konya Int

“

Konya is one of the most valuable cities in Turkey. Konya has got an old history and great cultural heritages. We want to give some information about Konya.

Konya's Surface Area and Population

Konya has got the largest area in Turkey with 41,001 km². The population of Konya is 2.232.374.

Konya's Climate

Konya has a continental climate.

While summers are dry and hot, winters are cold and snowy. The coldest month in Konya is January with -1 and the hottest month is July with 23.

Konya's Neighbouring Cities

Konya is in the south-west of Turkey and Konya has 9 neighboring cities. These are:

- Ankara • Antalya • Karaman
- Eskişehir • Niğde • Afyon • Aksaray
- Isparta • Mersin



roduction



❶ The Museum of Mevlana

This is the tomb of Mevlana Celaleddin Rumi and this place is one of the most visited places in Konya.

❷ Karatay Madrasa

Karatay Madrasa is a structure that has survived from the Seljuk period. It is open to visitors every day of the week.

❸ The Salt Lake

The Salt Lake is Turkey's second largest lake after the Van Lake. The Salt lake is also in the World Heritage Temporary List by UNESCO.

❹ Kilistra and Lystra

These ancient cities are located 45 kilometers from the center of Konya. It is one of the first centers of Christianity.

❺ Konya Butterfly Valley

Konya Butterfly Valley promises you a tropical environment with its nature. It is home to nearly 10 kinds of butterflies. Konya Butterfly Valley is one of the most beautiful places to visit with your family.

DIYARBAKIR

TRANSLATED BY
HASAN BERAT EKINCI



Diyarbakir is located in the Southeastern Anatolia Region of Turkey. Population of Diyarbakir is 2.230 million according to 2021. It is the 6th most crowded city of Turkey.

Diyarbakir's climate is continental. Summers are hot and dry, winters are snowy and cold in Diyarbakir.

In the east of Diyarbakir is Batman and Muş, in the west of Diyarbakir is Şanlıurfa Adıyaman and Malatya. In the north of Diyarbakir is Elazığ and Bingöl and in the south of Diyarbakir is Mardin.

Diyarbakir's city center has got a history about 9000 years.

Diyarbakir has got a lot of historical structures. For example The Walls, Hasan Pasha Inn, Kurşunlu Mosque, Ulu Mosque and Malabadi Bridge. The most known historical structure of Diyarbakir is The Walls.

The Walls was built about six thousand years ago. Its length is more than five kilometres and its height from the ground is twelve metres. It is the longest wall after the Great Wall of China in the World. It is on the UNESCO World Heritage List.

Finally, Diyarbakir's food culture is very developed. For example lamb ciger, kibe mumbar and corek.

TRANSLATED BY
EMIR TALHA ÖZTÜRK

UNMANNED Aerial Vehicle

UAV is a non-human aircraft. Its most important component is the communication system between the ground and the air. UAVs are divided into two classes: remotely controlled and automatic flight.

UAVs can be used in different areas, some of them: exploration, attack, firefighting, health. UAVs can be reused, different ammunition can be fitted and has many different models.

The first UAVs were developed by A. M. Low in 1916. Reginald Denny developed the first scaled RPV (Remote Piloted Vehicle) model. A large number of aircraft were pro-

duced during World War II, and they were used in anti-aircraft and assault missions to protect trains. The first jet powered UAV is the Firebee I, developed by Teledyne Ryan. UAVs provide many advantages, for example: there is no need for the necessary things for man. It costs less. There is no loss of life in accidents. Today, UAVs are developing rapidly and acquiring new technologies.

In our country, there have been many developments in the field of contracting and it continues. One of these developments is Baykar's Akinci, Mini UAV, TB2, TB3; Aksungur and Anka made by Tusaş are the leading UAV's.

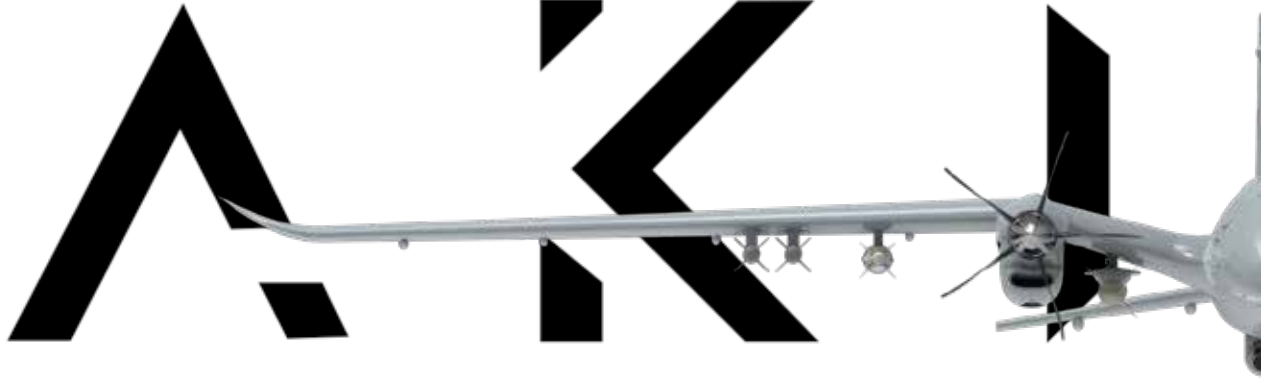


① Aksungur



② Akinci

TRANSLATED BY
EFECAN IŞIK



Baykar Bayraktar Akinci is an armed unmanned aerial vehicle with high altitude long endurance (HALE) class features developed by Turkey-based defense industry company Baykar Defense. It entered the Turkish Armed Forces inventory for the first time on 29 August 2021.

Akinci has a maximum take-off weight of 5500+ kg with its two turboprop engines. 1350+ kilograms of this consists of payload. It is also called the Assault Unmanned Aerial Vehicle (TiHA) because it can conduct air combat. forward; It is equipped with electronic support and countermeasure systems, dual satellite communication systems, air-to-air radar, collision avoidance radar and nationally developed synthetic range radar.

There are 3 different variants called Akinci A, Akinci B and Akinci C, each of which has different engines.

The first images of Akinci caught the eye in the news in June 2018. The engine process started in August 2019 with the AI-450C engine

of Ivchenko-Progress, a Ukraine-based engine manufacturer.

Akinci's first engine test was held on September 1, 2019. After completing other technical tests, the aircraft was moved to the Turkish Armed Forces' Çorlu Airport Command facilities. On December 6, 2019, it made its first flight after automatic taxi and take-off. After sixteen minutes of test flight, it landed successfully.

On April 22, 2021, he made the first test shot with real ammunition. Roketsan hit targets accurately with MAM-T, MAM-L and MAM-C ammunitions.

On July 6 and 7, 2021, Akinci reached an altitude of 38,039 feet (11,594 m) during its 25-hour test flight and traveled a total of 7,507 kilometers.

On March 2, 2022, Akinci B, Akinci's new model that produces more power, made its maiden flight. Pratt & Whitney Canada's PT6A-135A engine was used in this model.

- On January 10, 2020, Prototype-1 made its second flight and reached an altitude of 5000ft.

- On 13 August 2020, prototype-2 made its maiden flights.

- On August 19, 2020, prototype-2 conducted mid-altitude system integration flight tests.

- In the flight test carried out on August 22, 2020, the prototype-1 reached a flight altitude of 30,000 feet.

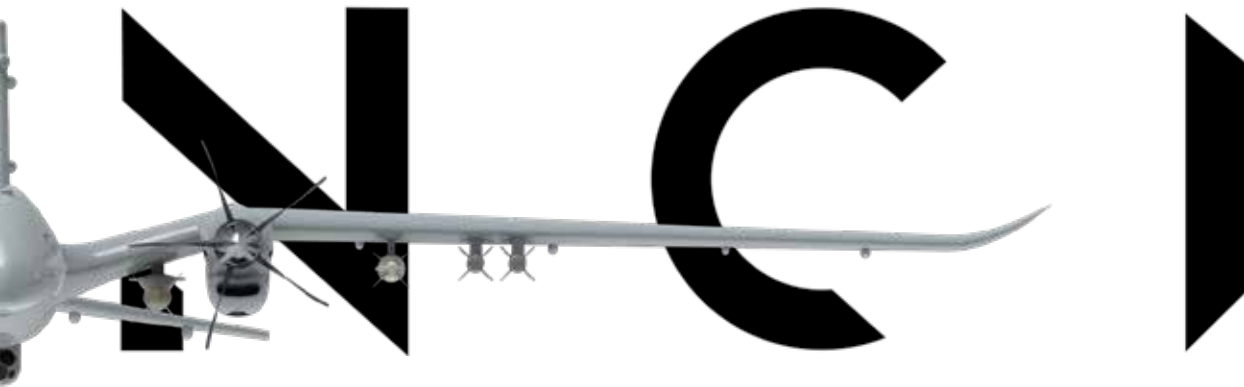
- On September 5, 2020, prototype-2 carried out high altitude and high speed flight tests.

- A Critical Design Review was conducted for Bayraktar Akinci UCAV platform on 8-9 September 2020.

- On October 3, 2020, prototype-2's asymmetrical thrust tests were carried out.

- On March 13, 2021, prototype-2 performed advanced system integration flight tests.

- Bayraktar Akinci prototype-3 made its first flight on March 27, 2021.



- On April 10, 2021, prototype-3 performed mid-altitude system integration flight tests.

- On April 13, 2021, prototype-3 performed high altitude and high speed flight tests.

- Made the first test fire on April 22, 2021. ROKETSAN hit targets accurately with MAM-T, MAM-C and MAM-L ammunition.

- On Sunday, August 29, 2021, 3 Akinci TiHAs entered the inventory of the Turkish Armed Forces.

- On March 2, 2022, Akinci's new model, Akinci B, which produces more power, made its maiden flight.

General Features

- Crew: none
- Length: 12.2 m (40 ft)
- Wingspan: 20.0 m (65.6 ft)
- Height: 4.1 m (13.1 ft)
- Maximum take-off weight: 55000 kg (12,125 lb)
- Payload: 1,350 kg (2,980 lb)
 - Internal: 450 kg (990 lb)
 - External: 900 kg (2,000 lb))
- Power unit: 2× Ivchenko-Progress AI-450C turboprop engine, 450 hp (335 kW) (Each)

Performance

- Maximum speed: 195 knots (361 km/h)
- Service ceiling: 40,000 feet (12,192 m)

Avionics

- National AESA Radar
- Aselsan Common Vulnerability Targeting System
- Electronic Warfare Pod

Guns

- Hardpoints: 7 with provisions to carry combinations of:
 - Missiles:
 - GÖKTUĞ air-to-air missile
 - Miniature bomb
 - SOM (missile) cruise missile
 - Micro Smart Munitions (MAM-T, MAM-L and MAM-C)
 - CIRIT
 - Mk81
 - Mk82
 - Mk83

TCG ANADOLU

TRANSLATED BY
MUHAMMED AZAM ASLAN

Anadolu or Anadolu L-400, under construction, is Turkey's first ship to be classified as an amphibious assault ship (LHD) in terms of its main configuration. It can also be used in amphibious operations in terms of its main formation. Work began in 2014 for the construction of the ship, which will

become the flagship of the Turkish Naval Forces when its construction is completed. In the design of the ship, the design of the Spanish Navy ship Juan Carlos I (L61) was taken as an example. TCG Anadolu, built in line with the needs of the Turkish navy, will be able to hold 8 fully equipped helicopters. A bat-

talion will be able to dispatch full-fledged soldiers to the desired region. It is thought that the ship, which is suitable for intercontinental missions, will actively continue its duties in the Black Sea, Aegean and Mediterranean.

About TCG ANADOLU

With its 12-degree inclination, Anadolu will facilitate the take-off of warplanes, and thus, it will facilitate the use of aircraft other than helicopters. It is also planned to order the Lockheed Martin F-35B model, which can perform short take-off and vertical landing, in order to take part in the Anadolu ship. The ship, which will be used as a multi-purpose amphibious assault ship, has the capacity to carry 1,400 people. It will be able to land an amphibious battalion without the need for communication, combat and support vehicles. Aside from its seven-hundred amphibious

force, the Anadolu ship, which can accommodate eight sea landing craft, will have a military hospital with a capacity of at least thirty beds, including an operating room, dental treatment units, intensive care and infection rooms. It is planned to be launched in 2021 and start working at the Naval Forces Command.

Baykar CEO Haluk Bayraktar announced in a live broadcast he attended that they had developed a vertical take-off and conventional SiHA for Anatolia and that it would be ready within a year.

U



Technical specifications

Ship length and width

232x32 m

Range of motion

9,000 miles

Maximum speed

21 knots

Heavy duty garage

1,410 m²

Maximum height

58 m

Light duty garage

1.880 m²

Ship's dock

1.165 m²

Hangar

900 m²

Flight deck

5,440 m²

Warplane capacity

6 warplanes

Attack helicopter capacity

4 T-129 Attack

Also:

**8 transports, 2 Seahawk
helicopters**

Unmanned aerial vehicle
capacity

10 TB-3 and other versions



Visit of

WRITER
MUHAMMED AZAM ASLAN

Mehmet Gürcan Karakaş (CEO of TOGG) to Our School

As Sancaktepe Teknoloji İHL family, several seminars was given in our school. In these seminars, I gained knowledge that shaped our lives by academics and experts in their fields, but one of the seminars that I was most interested in was given by Mr. Gürcan. He is the CEO of our domestic car brand TOGG, which is already the pride of our country. That's why I was very excited to see him in our school.

Among the topics he talked about in the conference he gave us, he talked about the tools of today and the past, and how his current and past career choices can change. For example, in the past, the main issue in car

construction was the engine and transmission, but he mentioned that with the development of technology, it is more important to work in the field of electronic accents and software in line with the needs of electric vehicles. Accordingly, he mentioned that we should turn to electrical, electronics and software engineers instead of mechanical engineering, and that we should work in this direction.

He also told us how our national pride, TOGG, has come to and what will be done in the future. For example, the C-suv (picture 1) model of our vehicle has already been introduced. In addition, the sedan model

was also introduced by Gürcan Bey at CES 2022 in the USA (<https://www.youtube.com/watch?v=DQeyLmVIA-IU> and picture 2). In addition to these, he said that the models in other segments will be released sequentially. When we asked the reason for this, he said that the construction of the first model of a product was a long and arduous task since it was started from scratch, but that other products could be released to the market more easily and quickly after the first product, and that they did and will do their best to speed up this process.

He told us that they first blended the eastern and western cultures in their vehicles and made a special vehicle in terms of design, and that the reason why the vehicle attracted so much attention in international fairs was that the award-winning interior and exterior design of the vehicle had a unique and characteristic structure (picture3). Let me state that I agree with this issue because it is the small but laborious details that make a project unique and beautiful. For example, when you buy a piece of furniture, you know that hand-carved furniture is preferred because it is because of those beautiful details carved with small but hard work. At TOGG, a lot of effort has been made and professionally worked on this subject, and a unique product has emerged.

He shared with us very important information about the battery problem, which is one of the problems that electric vehicles generally experience today. For example, the batteries of the vehicle were not abroad, he mentioned that it would be at the Gölcük facility, which is under construction, and then it would be moved to another area near the facility. He told us that these batteries will have a range of 300-500 thousand km and that fast charging stations will be installed in our country at short intervals, depending on the areas with heavy traffic, and these stations have been ordered. The issue that makes our batteries special is that they will be produced in our country thanks to the partnership of a world-renowned company with domestic facilities, and we can say that we are among the few countries that do this.

One of the questions we asked about TOGG was how the service would be carried out in case of any malfunction of the vehicle. According to Gürcan Bey, internet could be added to the vehicle in old league vehicles, but TOGG defined it as a tool within the internet, that is, in case of any problem of TOGG, since the section with the

At TOGG, a lot of effort has been made and professionally worked on this subject, and a unique product has emerged.



problem is directly connected to the internet, the owner of the vehicle is informed and the service is given accordingly. He also stated that it does not need to be serviced as often as in internal combustion cars, and it will be visited less frequently. In addition to this issue, it cannot be used actively for the autonomous phase of the vehicle due to legal problems in our country at the moment. However, he stated that they have a work on that subject as well.

In short, in the new world, which we understand from a nice and productive conference, new kinds of works and new kinds of occupations appear before us. The important thing is that we need to have a say in this global struggle with our own ideas, by looking at the technology revolution not only from a western approach, but from our own perspective, without forgetting our own culture, with this transformation. In this, we should pour original ideas into products and contribute to our country and the Islamic world. I think the most important issue that this conference brought to us is that we need to understand that a high dose of energy and effort is required while doing these and we need to work now.

TRANSLATED BY
MUHAMMED BURAK KARA



Artificial Satellites of Turkey

What is satellite?

First of all, I wanted to start our article by explaining what satellite means in its simplest form.

Satellite: A small, space-based object that moves in a loop (orbit) around a larger object.

What is an artificial satellite, what are its functions?

We explained what satellite means. So what is an artificial satellite, what are its duties, why did people need artificial satellites?

Artificial Satellite: Artificial satellites are semi-independent systems that are placed in orbit of the Earth or other planets and are usually controlled by computers.

Duties of Artificial Satellites: We classify satellites according to either the work they do or the orbits they follow. But these classifications are interrelated because the work a satellite does usually determines how far it should be from Earth, how fast it should move, and the trajectory it should follow.

General duties of satellites:

- Communication
- Photography, imaging and scientific research
- Navigation

We talked about the missions of satellites. So why are artificial satellites needed?

We send satellites into space to circumvent the various limitations of the Earth's shape. If you want to make a phone call from the North Pole, you send the signal into space, use a communications satellite as a mirror, and deliver the signal to its destination. In short, people want to make their lives easier and

the things they want to reach more places, etc. They needed artificial satellites in many areas.

We have briefly clarified satellites and artificial satellites. So, how is our country's relationship with satellites, what kind of work have we done in this area? I will try to explain this part without confusing you too much.

Before satellite studies in our country, I wanted to start with the first satellite launched into space. "Sputnik 1", the first artificial satellite sent into space, was launched in 1957 by the USSR, that is, by today's Russia. We can say that this date was the start date of the space

wars as well as the launch of the first artificial satellite.

In our country, Türksat 1A, the first artificial satellite, was launched on January 24, 1994, and this launch did not bring a good result for us. It fell into the ocean 12 minutes and 12 seconds after its take-off due to a malfunction in its rocket.

We talked about our country's first artificial satellite experience. Satellites are sent into space for a specific mission. Our country has also sent satellites to space for a certain purpose. Let's take a look at these satellites together.

1. Our Satellite: Türksat 1A

The first communication satellite that our country has attempted to send into space is Türksat 1A. It was launched into space with the Ariane 4 rocket from the Guiana Space Center in Kourou on January 24, 1994 at 23:37 CEST. However, the launcher fell into the ocean after 12 minutes and 12 seconds due to a malfunction in the third floor of the rocket. Since it has insurance, the cost of construction was taken from the insurance company. As a result, our country's first satellite test ended unsuccessfully.

2. Our Satellite: Türksat 1B

We Turks can hardly tolerate failure. The same situation happened with the satellite, and our engineers, who started to work without wasting

time, developed the Türksat 1B satellite. In addition to being our first communication satellite sent into space, this satellite also has the title of Turkey's first satellite launched into space. Türksat 1B was launched into space with the Ariane 4 rocket on August 10, 1994 and succeeded in orbiting. Türksat 1B, which served as a communication satellite for 12 years, was retired in 2006 and is currently inactive.

3. Our Satellite: Türksat 1C

Our country was gradually developing in the field of satellite. When the dates showed July 10, 1996, Türksat 1C, the second communication satellite of our country that could be successfully launched, was launched into space with the Ariane 4 rocket and successfully entered orbit. Türksat 1C, which has been serv-

ing as a communication satellite for approximately 14 years, transferred all its signal traffic to the new generation Türksat 3A satellite, which is of higher quality, more comprehensive, in 2008. On the other hand, the satellite, which completed its task in television broadcasting towards the end of 2008, retired completely in 2010 and is currently inactive.

4. Our Satellite: Türksat 2A

Another Turkish communication satellite sent to space by our country is Türksat 2A. Launched with the Ariane 4 rocket on February 1, 2001, the satellite successfully entered orbit and started its mission at 42 degrees East longitude. This communication satellite, operated by Türksat, was designed by the Eurasiasat company, which was established with the partnership of Türk Telekom

and Alcatel. Türksat 2A, which has been in service for about 15 years, completed its duty on September 27, 2016 and is in a passive state.

5. Our Satellite: Bilsat

As time progressed, we also developed quite a bit about satellites, and these satellites were mostly about communication. However, a satellite was also needed for observation. Earth observation and remote sensing satellite Bilsat was built for experimental purposes. Bilsat was launched into space on September 27, 2003 from Russia's Plesetsk Ramp with the Cosmos-3 launch vehicle. Bilsat, which is designed to have a duty life of 5 years; It is in synchronous orbit with the Sun at an altitude of 686 km. Satellite; cartography, disaster monitoring, monitoring of pollution and the environment, and urban planning and planning purposes. Apart from this, the multi-band camera Çoban and real-time image processing hardware Seyahat, designed and developed by Tübitak Space, are being tested.

6. Our Satellite: Türksat 3A

Satellites were not only developing in our country, but also in the world. Our country was also working non-stop for better quality. Our new satellite Türksat 3A was sent into space with the British Skynet 5C satellite on 13 June 2008 and was built by Thales Alenia Space company. In addition, 22 Turkish engineers took part in the construction of the satellite. This satellite, which is still active, started its duty on 16 July 2008 after taking over all the signal traffic of Türksat 1C satellite. On the other hand, on October 27, 2008, the

frequencies of the channels broadcasting on Türksat 2A were transferred to Türksat 3A satellite. Its operational life is designed to be 20 years. It has a 25% longer lifetime than other Türksat satellites.

7. Our Satellite: Rasat

There was also a novelty in the satellite. Times were changing, needs were changing and increasing. Upon this, Rasat, the owner of the title of the first earth observation satellite, whose design and production was carried out entirely in Turkey, was made. Rasat was launched into space with a Dnepr rocket from Yasny Launch Base in the Orenburg region of Russia's Kazakhstan border on August 17, 2011. The satellite, designed by TUBITAK in Turkey without consulting or external support, works for the purposes of cartography, disaster monitoring, pollution and environmental monitoring, and urban planning and planning. At first, the observation satellite, whose design life was cut as 3 years, is still active even after 10 years.

8. Our Satellite: Göktürk 2

Göktürk-2, our second observation satellite developed in cooperation with TÜBİTAK UZAY and Turkish Aerospace Industries, was sent into space on 18 December 2012 from Jiuquan Launch Base in China with a Long March-2D rocket. Turkish engineers made 80 percent of the hardware and 100 percent of the software (a source of pride) of the Göktürk-2 satellite.

9. Our Satellite: Türksat 4A

Our communication satellites

were being renewed without slowing down. When the dates show February 14, 2014, the Türksat 4A communication satellite, which is currently used by our televisions and designed by the Japan-based Mitsubishi Electric company, in which Turkish engineers are involved, was launched with a Proton rocket from the Baykonur Cosmodrome in Kazakhstan. After being tested at 50 degrees east longitude for about 4 months, the satellite left the tested orbit on 9 June 2014 and switched to 42° east longitude, where it will serve. He continues his duty actively.

10. Our satellite: Türksat 4B

Not long after the launch of the Türksat 4A satellite, our beautiful country, which started to work on the Türksat 4B satellite, sent the communication satellite it designed jointly with the Japan-based Mitsubishi Electric company into space with a Proton rocket from the Baykonur Space Base in Kazakhstan on October 16, 2015. In fact, the previously determined date for sending the satellite into space was October 6, 2015. However, the launch time was delayed for 10 days due to the maintenance of the proton rocket, which was damaged during the launch of other satellites at the Baikonur Cosmodrome. He is currently working.

11. Our satellite: Göktürk-1

Göktürk-1, our ground and observation satellite designed for the Ministry of National Defense by the Italian space service company Telespazio with the technological contributions of Turkish Aerospace Industries, Inc. and Aselsan, was launched from Kourou with a



Vega rocket on 5 December 2016. It goes around the world once every 90 minutes. In addition, it is used in a variety of civil applications in mapping and planning, land cover survey, geology, ecosystem monitoring, disaster management, environmental control, coastal zone management and water resources. He continues his duty actively.

12. Our satellite: Türksat 5A

Türksat 5A, the newest satellite sent into space by our country, went into space from Cape Ca-

naveral Base in the USA on January 8, 2021, with the Falcon 9 rocket of SpaceX, of which Elon Musk is the CEO. Türksat 5A satellite, whose orbital mission period is determined as 30 years; Turkey will provide TV broadcasting and data communication services with a capacity of 1728 MHz in a geography covering Europe, the Middle East, North Africa, Central West Africa, South Africa, the Mediterranean Sea, the Aegean Sea and the Black Sea. Good luck to our country again!

Those on the Road...

We have seen our country's work on satellites. So is it over? No! New ones are coming... Most likely, in 2023, Türksat 6A (Communication satellite), İmece (Observation satellite) v Göktürk-3 (Radar satellite) in 2025 will hopefully be in service to this country.

From the author...

Dear readers;

First of all, thank you very much for reading the article. This was my first post for such a medium. We have had errors or omissions. I hope you enjoy these.

The History of Tanks

TRANSLATED BY
SALİHEYMENŞAN



Hi my valuable friends, respectable teachers, dear custodians. I wanted to support our school's English magazine with a writing. So I decided to write this writing which is about "Tanks' history". I used Ayhan Tarakci's videos and Wikipedia, if you want more information you can look at them. I hope you like it.

Humans have wanted to make and use big war machines that destroy enemies and make people terrified. We can give these examples for that. Hannibal's and Timur's elephants, Egyptians' and Greeks' war cars, Europeans' heavy cavalry etc. But first tank models that are close to today occurred in the beginning of 20. century. When World War 1 started, it instantly became a front line battle. It was terrible for states which were in the war. Because they had to use thousands of soldiers to go forward a few meters. So, United Kingdom started to develop a vehicle that can cross trenches, break through barbed wire, be immune to machine gun fire. They created a prototype that named Little Willie. After they created Mark 1, the first tank. They used these war machines against Germans in Sep-

tember 15, 1916 for their first time. They caused so much fear but later their bad sides became obvious. They were too slow, insecure, inefficient for oil and Germans found some ways to destroy these machines. In the next 2 years of the war, other countries created some prototypes too but generally tanks didn't affect World War 1 too much. People started to use "Tank" for these war machines in this war too. Because, while British were working on this Project, they had to hide this project. So they wrote "Water tanks which are going to Russia" in official correspondence for these machines.

After the war, many countries continued to develop tanks. Especially France was the country that gave the most importance. 3 types of tanks appeared during this time: light tanks, medium tanks, heavy tanks. Germany started to pay attention to this during 1930s. These years, German commander Heinz Guderian who was a tank expert developed a strategy that called "Blitzkrieg" or we can say "Lightning war". This strategy changed history of tanks.

With start of World War 2, Germany showed importance of tanks with Blitzkrieg. They conquered many countries like France, Poland, Denmark, Greece... in very short time. World War 2 was golden age of tanks. There were too many important models like Tiger, Panzer 4, T-34, Sherman, Valentine that affected many other tank models in following years.

After the war and following years, with new technologies of armor, suspension, cannon and radio, tank designers started to pay attention to these technologies instead of quantity. And this caused extinction of old tank species. Now, many of tank models were in "Modern/Main battle tanks" class. We can liken this class to medium tanks. You can use them to help to infantry or battle with tanks.

Turkey did some projects for tanks too but they didn't come to any important conclusion. Our modern tank project "Altay" is still on development stage.

The most interesting information in



Do you know when a glass is broken, crumbs are scattered at a speed of three thousand miles per hour.



Do you know one of the former US presidents, John F. Kennedy, could read four newspapers in twenty minutes.



Do you know on a clear night, it is possible to see two thousand separate stars with the naked eye.



Do you know American airlines made a profit of 40 thousand dollars in 1987 by removing an olive from each tray at breakfast served to passengers on flights.



Do you know horses have 18 more bones than humans.



Do you know the entrances to bear dens always face north.

the world!

PREPARED
KAANKÖYİÇİ & AKİF TURAN

Do you know these?



Do you know the owl is the only bird that can see the color blue.



Do you know a Big Mac hamburger contains an average of 178 sesame seeds.



Do you know an ostrich's eye is bigger than its brain.



Do you know on February 18, 1979, it snowed in the Sahara desert.



Do you know a man spends an average of 3350 hours of his life shaving.

SIS

Short Info Service

TRANSLATED BY:
AKİF TURAN & ÖMER YUSUF YILMAZ

WHAT IS NANOTECHNOLOGY

Nanotechnology is the term given to those areas of science and engineering where phenomena that take place at dimensions in the nanometre scale are utilised in the design, characterisation, production and application of materials, structures, devices and systems.

HOW SOLAR PANELS WORK.

Every day, light hits solar panels with photons (particles of sunlight). The solar panel converts these photons into direct current ("DC") electrons. Electrons flow from the solar panel and into an inverter and other electrical safety devices. The inverter converts "DC" power to alternating current or "AC" power.

APPLE'S AR an VR Glasses

It was known for a long time that apple working on AR and VR glasses. New discovered name registration, will indicate to Apple's introduced it's first goggles anytime soon

News about Xiaomi

After introducing the Xiaomi Mi Band 7, now information about the Pro models has started to emerge.

Microsoft, announced a new cloud xbox device.

Software boss Microsoft, The Xbox cloud device, which appeared recently, confirmed the development of Keystone and shared new information. The new device could launch in the coming months.



Samsung, officially quits LCD TV panel production.

Samsung Display, the display division of Samsung Electronics, is preparing to completely finish production of LCD panels for televisions in June. The company will now focus only on Quantum Dot and OLED.

Twitter fined \$150m in US for selling users'

data.

Twitter in the US must pay a \$150m (£119m) fine after law enforcement officials accused it of illegally using users' data to help sell targeted ads. The Federal Trade Commission (FTC) and the Department of Justice say Twitter violated an agreement it had with regulators, court documents showed.

Facebook owner Meta updates its privacy policy.

Millions of users of Meta products, including Facebook and Instagram, are to receive notifications of the firm's updated privacy policies. Meta says the changes are designed to make it easier to understand how customers' information is used. The company has previously been criticised by regulators and campaigners over its use of customers' data. WhatsApp and some other products are not covered by the update.

Google probed by competition watchdog over ad dominance.

The UK's competition watchdog has announced a probe into Google's dominance of the advertising market. The Competitions and Markets Authority (CMA) is investigating whether Google used its prominence to illegally favour its own services over those of rivals.

Artificial Intelligence (AI) and Machine Learning.

Artificial Intelligence, or AI, has already received a lot of buzz in the past decade, but it continues to be one

of the new technology trends because of its notable effects on how we live, work and play are only in the early stages. AI is already known for its superiority in image and speech recognition, navigation apps, smartphone personal assistants, ride-sharing apps and so much more.

Cinemas now accepting digital ID cards.

Being turned away from a 15 or 18 rated film for not having the right identification with you might be a thing of the past. The UK Cinema Association - which includes Cineworld, Odeon, Showcase Cinemas, and Vue - are partnering with digital ID firm Yoti. The free app will be accepted as proof of age, providing a safe and convenient way to show ID. It is hoped the move will tackle abuse against cinema staff too.

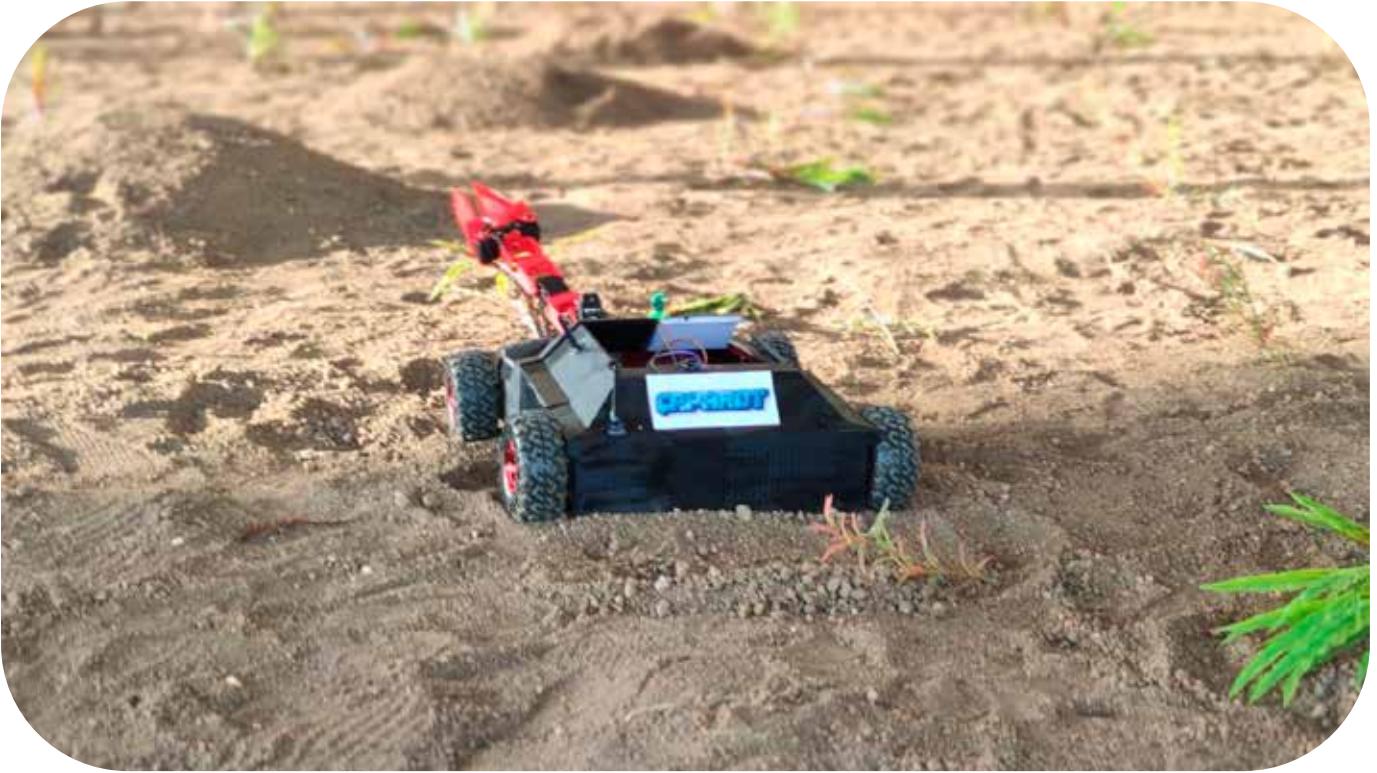
Dyson working on home robots.

Dyson is moving beyond vacuum cleaners and hand driers and will try to develop robots capable of helping with household chores. The company has announced plans to create a major robotics centre at its facility at Hullavington Airfield, in Wiltshire, that will work on new types of domestic robot. The site will be home to 250 robotics engineers. Dyson already produces robotic vacuum cleaners.

The Prince Rupert Drop (also known as the Dutch Teardrop)

The Prince Rupert Drop (also known as the Dutch Teardrop) is a teardrop-shaped drop of toughened glass with a long, slender tail that is resisted by dropping molten glass into cold water. While the very high permanent tension inside the droplet gives the droplet the ability to resist the impact of the convex side with a hammer or even a bullet, a light blow to its long thin tail causes the drop to shatter completely. Certain conditions created by volcanic lava can also cause similar structures to appear.





TECHNOLOGY IMAM HATIP HIGH SCHOOL

and CAPAROT

PREPARED BY:
İSMAIL DURMAZ

As the TAIL team, we have set our country's goal to increase its interest in agriculture as our main target. For this purpose, we thought about how we can encourage people to agriculture and listed the main reasons why people stay away from agriculture as follows:

- 1- Labor force
- 2- Large machine costs
- 3- Fuel costs
- 4- Lack of space

We couldn't solve all of these problems. That's why we focused on the first three items at first. We thought of making a robot. This robot should be controlled easily, should not take up much space and should use renewable energy source. In this way, we can avoid fuel costs.

We thought that the most difficult part of our workers in agriculture was to make an anchor for our robot, which is also the source of its name. That's why we started to de-

sign Caparot on paper. We designed our robot according to the features we determined earlier. After working tirelessly for six months, we completed Caparot, which we designed and produced with 3D printers and all the software ourselves.

Our robot Caparot was built to contribute to modernization in agriculture by using less time and manpower. Caparot has a mobile robot arm that can be controlled by remote control and has a hoeing de-

vice at the end. In addition, it has the opportunity to see the area we hoe with the fpv camera on the top. The hoeing process is carried out more easily, thanks to the fact that the robot arm that will make the hoe can be easily controlled with the hoeing head in front of it and the camera in the vehicle. 2 joysticks for forward-backward, right-left movements in our vehicle; There are 4 potentiometers for the robot arm and 1 switch to switch between vehicle and robot arm modes. In addition, our vehicle can rotate 360 degrees around itself. The features of our vehicle are briefly as follows:

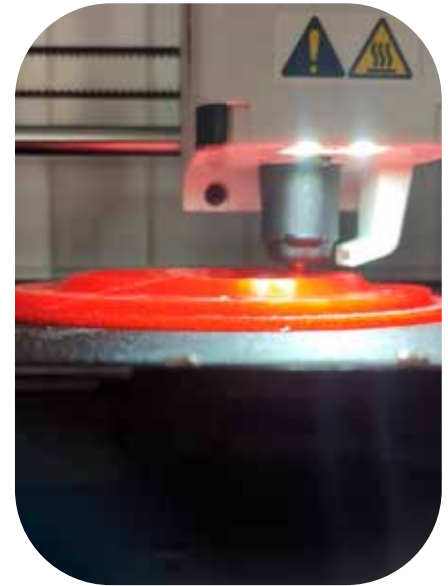
1. Remote control with Nrf module
2. Being able to see the area to be hoed thanks to the camera
3. Robot arm with an easy-to-use anchor head
4. Wheel and design compatible with terrain conditions
5. Headlights for use in dark environments

Innovative Aspect: Caparot does not take up much space in your garage and garden, thanks to its 35/50

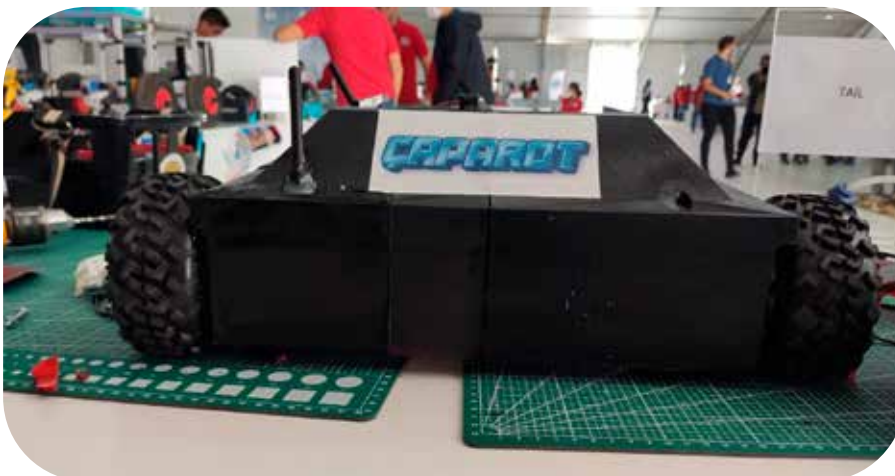
cm size and special design, unlike hoeing machines that can hoe using a tractor. It is also easy to use. Our remote, on the other hand, has both an ergonomic use and multiple features. It is also an environmentally friendly vehicle as it works with electricity. In addition to these, there is a specially designed robot arm and head that is used for anchoring and has an ergonomic use.

Target Audience of the Project (Users): The target audience of the project is the individuals who have difficulty in anchoring and who have unwanted health problems such as low back pain due to anchoring for a long time. However, Caparot is not only designed for individuals with health problems. It will contribute to everyone who is engaged in agriculture.

As a reward for this effort, we managed to be among the first thirty projects that made it to the finals among 1400 participants in the Technofest competition we participated in. In the final, we took the twentieth place.



Our remote, on the other hand, has both an ergonomic use and multiple features. It is also an environmentally friendly vehicle as it works with electricity.



Geleceęi Burada Keşfet...

Sancaktepe Teknoloji Anadolu İmam Hatip Lisesi



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