



Cagil Benibol

Nationality: Turkish | **Phone number:** (+49) 15753284005 (Mobile) | **Email address:**

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<https://github.com/Tihulu> |

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About me:

A curious Physicist doing his M.Sc. in Germany's leading universities and graduated from Turkey's one of the most outstanding universities with an honors degree. Have strong theoretical background and problem-solving skills. Knows statistical methods and data analysis in Astrophysics and Theoretical Physics. Knows Quantum Computing methods and algorithms. An effective team worker. Experienced in organizing many conferences and science festivals. A professional musician. Plays the keyboard and piano in several bands.

EDUCATION AND TRAINING

2022 – CURRENT München, Germany

M.SC. QUANTUM SCIENCE & TECHNOLOGY Technical University of Munich & Ludwig Maximilian University of Munich

Address München, Germany | **Website** tum.de

2016 – AUG 2022 Ankara, Turkey

B.SC. PHYSICS, HONORS DEGREE Middle East Technical University

Address Ankara, Turkey | **Website** metu.edu.tr | **Field of study** Physics |

Final grade CGPA: 3.00 /4.00 – Honors Degree with 317 ECTS |

Thesis Estimating Hamiltonian in a Schwarzschild (Black Hole) Metric with Quantum Computers Using VQE Algorithm

2019 – 2019 Istanbul, Turkey

FEZA GURSEY INSTITUTE HAKKI OGELMAN SUMMER SCHOOL ON "ASTROPHYSICAL MODELING" Feza Gursey Institute, Bogazici University

Address Istanbul, Turkey | **Website** <http://fezagursey.boun.edu.tr/>

WORK EXPERIENCE

2022 – 2022 Ankara, Turkey

QUANTUM COMPUTING QBRONZE AND QSILVER / METU

QTurkey / Practical Quantum Computing for Scientists course was given in METU fall 2022

Final project/ RSA Decryption Algorithm with Shor's Algorithm

2022 – CURRENT Izmir, Turkey

BACKEND PROGRAMMER FREELANCE

From Excel Menu to HTML Website generator program.

Basically, HTML generating Python Script

tihulu.github.io/arafta

2020 – CURRENT

KEYBOARDIST MEDITERRA

2-Song Ep "Beni Anlat" and a single "Unknown"

MEDITERRA / SPOTIFY, APPLE MUSIC, YOUTUBE and more

2021 – CURRENT

MUSICIAN SOLO PROJECT

Ka-Fa 1500:
8-Song Album "Everyone is Confused" and a 4-Song Ep
"The_Trrektor.exe"
SPOTIFY, APPLE MUSIC, YOUTUBE and more
2021 – 2022 Izmir, Turkey
WEB AND GRAPHIC DESIGNER ARAFTA

QR Menu and Designing of the QR Code Plate
tihulu.github.io/arafta
Link tihulu.github.io/arafta

2021 – 2021 Izmir, Turkey
WEB DESIGNER FREELANCER

Portfolio website for Unseverdesign
tihulu.github.io/unseverdesign
Link tihulu.github.io/unseverdesign

2019 – 2019 Eskişehir, Turkey
SCIENCE GUIDE IN ASTRONOMY TUBITAK

Sivrihisar Science Fest Organized by TUBITAK (4007 Project)
2018 – 2018 Akara, Turkey
SCIENCE GUIDE IN ASTRONOMY TUBITAK

Altindag Science Fest Organized by TUBITAK (4007 Project)
ANKARA / TURKEY
2018 – 2018 Istanbul, Turkey
ORGANIZATION OF A PHYSICS SUMMIT INTERSCHOLASTIC PHYSICS STUDENTS' SUMMIT (IPSS)

1st Interscholastic Physics Students' Summit (IPSS)
ISTANBUL TECHNICAL UNIVERSITY / ISTANBUL / TURKEY
2017 – 2017 Ankara, Turkey
ORGANIZATION OF AN ASTRONOMY CONFERENCE AMATEUR ASTRONOMY SOCIETY OF METU

1st Dilhan Eryurt Astronomy Day
MIDDLE EAST TECHNICAL UNIVERSITY / ANKARA / TURKEY
2017 ANKARA, Turkey
SCIENCE GUIDE IN MTA MUSEUM & PHOTOGRAPHER BIOGEN SOCIETY OF METU

11th Aykut Kence Evolution Conference
MIDDLE EAST TECHNICAL UNIVERSITY / ANKARA / TURKEY

● LANGUAGE SKILLS

Mother tongue(s): **TURKISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
GERMAN	A1	A2	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● DIGITAL SKILLS

Web: HTML, CSS | Music Production: Logic Pro X, Cubase, Reaper | Others: Photoshop & GIMP, Familiar with Linux & Mac OS environments, Rasp-berry Pi & Arduino | Quantum Computing: Qiskit, Qiskit Aqua, QutIP, Cirq | Computer Languages: Python, C Anaconda Spyder/Jupyter, Spyder MATLAB & Octave | Astrophysics: SAO Image DS9, FermiTools, fermipy, CIAO, CALDB, XSPEC

ADDITIONAL INFORMATION

PROJECTS

2021 – 2022

Estimating Hamiltonian in a 3+0 Schwarzschild (Black Hole) Metric with Quantum Computers Using VQE Algorithm What I tried to understand in my graduation project is the free electron's behavior in a 3+0 Schwarzschild Black hole by looking at its Hamiltonian by using Variational Quantum Eigensolvers.

Link <https://github.com/Tihulu/400-Project-Cagil-Benibol>

2022 – 2022

RSA Decryption Algorithm with Shor's Algorithm Final project of a given course, called "Practical Quantum Computing for Scientists" in METU fall 2022

An algorithm that decrypts RSA with Shor's Algorithm on python Qiskit.

Link <https://github.com/Tihulu/quantumcomputing/tree/main/project>

2020 – 2020

Gamma & X-ray observations of RCW-86 with Fermi - LAT and Chandra Final project of a given M.Sc. course in METU called "Data Analysis on Astrophysics" in spring 2020.

Link <https://github.com/Tihulu/Astr-518>

REFERENCES

2022 – CURRENT

References from my undergraduate university

For Quantum Computing: Dr. OSMAN BARIŞ MALCIOĞLU, mbaris@metu.edu.tr

For Computational Physics: Prof.Dr. ALİ MURAT GÜLER, amg@metu.edu.tr

For Quantum Information: Prof.Dr. SADI TURGUT, sturgut@metu.edu.tr