

EMRE CAMKERTEN

Computer Scientist

PROFILE

Enthusiastic about AI & Science.
Always striving for The Goals
Let's meet in stories

CONTACT

[LinkedIn](#)
[GitHub](#)

E-MAIL:
equibit18@gmail.com

EDUCATION

HTL Spengergasse
2018 – 2023
Graduated in Computer Science

University of Vienna
2023 – present
BSc. Computer Science

HOBBYS

Reading and doing in-depth study,
Doing music, Learning

WORK EXPERIENCE

Mystery Minds - Full-Stack Developer Intern

July 2022 – August 2022 (2 Months)

Independent expansion as well as testing and documentation of new features using various technologies

- PHP
- Symfony
- JavaScript
- StimulusJS
- Twig Templates
- HTML
- (S)CSS
- Docker
- Linux
- VMware
- Client change requests (embedding videos, changing texts, ...)
- Implementation of features for the new frontend (confetti.js, writing test reports, ...)
- Setup of new customers and configuration of the platform to customer requirements
- Creation of business intelligence dashboards
- Testing (writing reports, evaluating Cypress)
- Setting up new laptops

QWorld - Quantum Computing Researcher

June 2024 – August 2024 (3 Months)

Bosch - Software Developer Intern

August 2024 – September 2024 (2 Months)

Software Development: Migration of old tools into new tools using state-of-the-art technologies.

Data Science and Cleaning: Automatizing the data correction of false and NaN entries. Determinance of the new main location of users based on the usage of the tools they are using.

Machine Learning: Developing a model that predicts which role users have based on the tools they are using. SMOTE as an imbalanced-dataset-regularizer technique was taken as a key problem solver.

SKILLS

Python, Java, C#, C++, HTML/CSS, SQL, Qiskit, Tensorflow/Keras, Git, Networking, Databases/Modelling, REST API, JavaFX/PyQt6, React, Django, Word/Excel/PowerPoint

PROJECTS

Tezrisat

Developing a cutting-edge website powered by LLMs that provides a unique service for building custom microcourses. This platform will allow users to effortlessly design their own microcourses, tailored to their specific needs, through the advanced capabilities of LLM technology. Whether users wish to quickly refresh a topic they have previously learned or gain concise insights into a new subject, our AI will facilitate the process seamlessly.

The AI will not only set up the course content according to user requirements but will also automatically generate essential learning tools such as Recall-Cards, Quizzes, and a Glossary. This comprehensive approach ensures a holistic learning experience, enabling users to maximize their understanding and retention of the subject matter efficiently. This project also embraces state-of-the-art, scientifically proven learning methods to maximize the learning experience.

In summary, this LLM-powered website aims to revolutionize the way individuals generate and engage with educational content, offering a personalized, efficient, and highly effective learning solution.

TwinTime

Developing a Time Management Web Application for Twininformatics: Enhancing User Efficiency and Productivity This project involves the design and development of a sophisticated web application dedicated to time management for Twininformatics. The primary objective of this application is to empower users to optimize their work schedules, thereby significantly enhancing individual productivity. The platform will integrate advanced features to streamline task organization, facilitate efficient time allocation, and improve overall work-time management.

Quantum Harris Corner Detection Algorithm

Corners are locations where the gray value intensity changes suddenly in two or more directions and used for describing and extracting characters, matching graphics, detecting moving objects, modeling 3D and tracking objects. Classical corner detection algorithms including FAST and Harris are computationally efficient, but their detection accuracy and repeatability are insufficient. In this study, Quantum Harris Corner Detection algorithm is realised. To load the dataset that consists of circle, rectangle, triangle and square image, two image encoding models, FRQI and QPIE, are used to compare results. Finally, in order to increase the quality of the algorithm, classical post-processing is applied to each point detected as a corner by the proposed algorithm. The proposed algorithm shows that with enough number of qubits, faster corner detection is achieved thanks to the quantum parallelism provided by the superposition property of qubits. The obtained results also show that

Quantum Harris Corner Detection algorithm is a promising tool for practical Quantum Image Processing applications.

Simulating Spin Dynamics using Control Theory

The central focus of this research is the potential application of Control Theory to dynamic systems, specifically spin systems, by writing a prototype of such a system to demonstrate and give users an intuition of how such a software might look and what potential implications it can have. The primary objectives of this application are to investigate improvements in spin systems with more than three spins by applying Control Theory. This involves developing methods to better manage and optimize the dynamic behavior of these complex quantum systems. Additionally, the research aims to create an educational tool for physics students, especially those studying quantum physics. This tool will enable students to study and analyze spin systems in a virtual environment, conserving physical resources and providing a hands-on learning experience. It will allow students to experiment with and understand the intricacies of spin systems without needing extensive physical setups. By integrating Control Theory into the study of spin systems, this research aims to advance understanding and optimization of multi-spin systems and provide a valuable educational resource.

SnapLock

In this individual exercise project (based on a video tutorial, just a little further developed :)), I developed a hand gesture recognition application using Python, OpenCV, and a hand tracking module. The focus of the project was to gain hands-on experience in real-time image processing and gesture recognition, key areas in the field of computer vision. The application captures video in real-time through a webcam and utilizes the HandDetector module for detecting and tracking hand movements. Key aspects of the project included working with video input, applying hand detection algorithms, and interpreting hand gestures.

QMario

Developing a simple quantum game within the QJam 2023/24 framework. In the game the user steers the Mario character (which is in a superposition state), but the character is quantum simulated. The user has to overcome obstacles and if the character hits an obstacle (gets observed), its superposition state collapses. Technologies like Python, Construct 2, Qiskit, etc. were used in the development.

A bunch of other smaller individual exercise projects can be found in my LinkedIn/GitHub account.

CERTIFICATES

DeepLearning.AI TensorFlow Developer

Verification:

https://www.coursera.org/account/accomplishments/professionalCert/K3_3GG68VV9XD

Convolutional Neural Networks in TensorFlow

Verification:

<https://www.coursera.org/account/accomplishments/verify/684T834E8M 48>

Natural Language Processing in TensorFlow

Verification:

<https://www.coursera.org/account/accomplishments/verify/KPUJKCVD6N HA>

Sequences, Time Series and Prediction

Verification:

<https://www.coursera.org/account/accomplishments/verify/QEAZGEAZ32 89>

Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning

Verification:

<https://www.coursera.org/account/accomplishments/verify/6PTQTFQSM YZ7>

TensorFlow: Advanced Techniques

Verification:

<https://www.coursera.org/account/accomplishments/specialization/8SNVF4BLS4J3>

Java Programmieren – Der Fortgeschrittenen Kurs

Verification: [ude.my/UC-8FHSJJ0Y](https://www.udemy.com/certificate/UC-bd369a87e60e-4fab-a717-7457a787f6ef/)

JavaFX – Benutzeroberflächen / GUIs in Java programmieren

Verification: <https://www.udemy.com/certificate/UC-bd369a87e60e-4fab-a717-7457a787f6ef/>

MIT iQuHack 2025

Verification:

Hash: c3f6f093

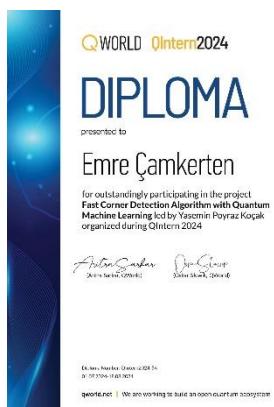
<https://www.iquise.mit.edu/iQuHACK/2025-01-31>



QWorld – QIntern 2024 Diploma, Research Project

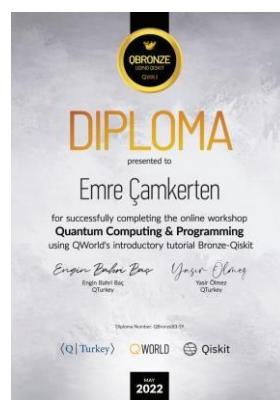
"Quantum Harris Corner Detection Algorithm"

Verification



Qiskit – Quantum Computing using Qiskit, QBronze Diploma

Verification:



Qiskit – Quantum Computing using Qiskit, QNickel Diploma

Verification:



Qiskit – Quantum Computing using Qiskit, QSilver Diploma

Verification:



Qiskit – Quantum Computing using Qiskit, QJam Diploma

Verification:



ECo-C – Kommunikationszertifikat

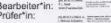
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Letter of Recommendations

Bosch (eventually has to be translated)

Bosch 

Bearbeiter*in:  Prüfer*in:

EINSCHREIBEN

Herr
Emre Cankerten
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1040 Wien

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Robert Bosch AG
Gänsegasse 15-17
A-1030 Wien
Telefon +43 1 79722-0
www.bosch.at

02. Oktober 2024

Arbeitszeugnis

Herr Emre Cankerten, geboren am 23. Oktober 2003, war vom 01. August bis zum 30. September 2024 in unserem Unternehmen als Ferienpraktikant tätig in der Abteilung Engineering Excellence Process, Methods & Tools Wi.

Herr Cankerten erledigte alle seine Aufgaben mit sehr großer Selbstständigkeit und Verantwortungsbereitschaft stets zu unserer vollen Zufriedenheit. Bei der Erfüllung der Aufgaben zeichnete er sich vor allem durch sein sehr hohes Maß an Eigeninitiative und seine Flexibilität aus.

Aufgrund seines stets kooperativen Verhaltens und seiner Kollegialität gewann Herr Cankerten rasch größte Akzeptanz und Anerkennung, sowohl bei Führungskräften, als auch bei Kolleg*innen und Kund*innen.

Abschließend möchten wir Herrn Cankerten für die Mitarbeit in unserem Unternehmen danken und wünschen ihm beruflich und persönlich alles Gute und weiterhin viel Erfolg.

Mit freundlichen Grüßen

Robert Bosch AG
Personalabteilung
Abteilung: Personalabteilung
L.V. der Robert Bosch AG

Stts: Robert Bosch Aktengeellschaft, A-1030 Wien, Gänsegasse 15-17, Registergericht: FN 55722 w HG-Wien
Aufsichtsratsvorsitzender: Dr. Thomas Paes; Vorsitz: Helmut Weinwurm, Whitem Prucker
Alle Marken sind eingetragene Marken der Robert Bosch GmbH, Deutschland.
BOSCH und die Bildmarke sind registrierte Marken der Robert Bosch GmbH, Deutschland.
Bankverbindung: UniCredit Bank Austria AG, IBAN: AT70 1209 0008 9499 0004, BIC: BKAUATWW

Mystery Minds (eventually has to be translated)

Mystery Minds 

Emre Cankerten
Favoritenstraße 38/19/3
1040 Wien

Wien, 30.08.2022

Praktikumszeugnis

Herr Emre Cankerten, geb. 23.10.2003, absolvierte in der Zeit von 04.07.2022 bis 28.08.2022 in unserem Unternehmen ein Vollzeit-Praktikum.

Mystery Minds GmbH ist ein HR-Tech-Unternehmen aus München und Wien. Wir entwickeln eine Software, die es Unternehmen ermöglicht, durch die Vereinfachung von Prozessen, neuen in großen und internationalen Konzernen menschlicher machen. Unsere Lösungen wie z.B. das Mystery Check oder Mystery Coffee werden aktuell von über 200 Kunden weltweit genutzt.

Herr Cankerten war als Praktikant in der Abteilung IT für folgende Aufgaben zuständig:

- Eigenverantwortliche Erweiterung sowie Test und Dokumentation neuer Features unter Nutzung verschiedener Technologien
 - o PHP
 - o Perl
 - o JavaScript
 - o StimulusJS
 - o Angular
 - o HTML
 - o SASS
 - o CSS
 - o Linux
 - o VMware
- Clean Code Respects (Veden reichtet, Teste sündige, ...)
- Umsetzung von Features für das neue Frontend (CoreFront), Testberichte schreiben, ...)
- Setup von neuen Kunden und Konfiguration der Plattform an die Kundenwünsche
- Erstellung von Business Intelligence Dashboards
- Testen von Frontend (Cypress eingesetzt)
- Aufstellen von neuen Laptops

Herr Cankerten zeigte eine schnelle Auffassungsgröße und verfügte über viele praktische Fachkenntnisse, die er zügig eingeschaut hat. Er zeigte über den gesamten Praktikumszeitraum hohe Motivation sowie große Eigeninitiative, mit der er Aufgaben selbstständig und stets von ausgezeichneter Qualität absolvierte.

Die von ihm übernommenen Aufgaben führte Herr Cankerten deshalb stets zu unserer vollen Zufriedenheit.

Wir danken Herrn Cankerten für seinen Einsatz und wünschen ihm für seine weitere Ausbildung sowie seinen weiteren beruflichen Weg weiterhin viel Erfolg und alles Gute.

Siegmar Mölbinger
Geschäftsführer

Mystery Minds GmbH
Raum 100a/11
80279 München

Dieses Dokument ist digital signiert!

GGRP (Global Guided Research Program)



Recommendation Letter - Emre Camkerten

To Whom It May Concern,

I am writing to highly recommend Emre Camkerten for any professional or academic endeavor they may choose to pursue. Emre Camkerten participated in The Global Graduate Research Program (GGRP), during which they demonstrated exceptional dedication, intelligence, and a strong work ethic.

Emre Camkerten worked on the Spin Dynamics project within GGRP. Throughout their involvement in this project, they consistently met and often exceeded expectations. Their ability to grasp complex concepts quickly and apply them innovatively was evident in their outstanding performance. They showcased not only technical skills but also creativity and critical thinking.

In addition to their academic and professional capabilities, Emre Camkerten displayed a genuine passion for their field of study. Their enthusiasm and commitment to continuous learning and development are indicative of a promising future.

I am confident that Emre Camkerten will excel in any path they choose to follow. Their skills, work ethic, and positive attitude make them a valuable addition to any team or organization. I wholeheartedly recommend them and am certain they will continue to achieve great success.

Should you require any further information, please do not hesitate to contact me.

Sincerely,
Husayn Gokal,
Chairman @QUAE,
husayn@quae.ae

LANGUAGES

Turkish (Mother Tongue)
German (Fluent)
English (Fluent)