

## TOGAN T. YUSUF

Date of birth: 23/06/1998 \* Nationality: Turkey \* Gender: Male

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## **EDUCATION**

Bachelor's Degree | Electrical and Electronics Engineering (English) June 2016 - June 2022 **Ankara University** Ankara, Turkey WORK EXPERIENCE January 2022 – Current STAR Research Scholar TÜBİTAK - Scientific and Technological Research Council of Turkey Ankara, Turkey/Remote • Research project on Deep Learning techniques for RF fingerprinting Research Intern June – September 2021 CERN openlab Geneva, Switzerland/Remote • Completed trainings and co-developed ML applications with python • Research project on generative models for Higgs boson process simulation • Final report on Quantum GANs for Higgs boson ttH process data generation **Project Leader** April 2017 - September 2020 Robotics and Science Society - Ankara University Ankara, Turkey • Led a team of 8+ students • Organized Python lessons and study groups for beginners • Worked on the development and design of image processing models **Electronics Technician** June - September 2019 Elektrolojik Energy Technologies Ltd. Co. Ankara, Turkey • Worked on electronics devices and their safety testing applications **COURSES Deep Learning** September – November 2021 Coursera - DeepLearning.AI Global Summer School on Quantum Machine Learning 12 - 23 July 2021 Oiskit IBM **Machine Learning** December 2020 - February 2021 Coursera - Stanford University **Foundations of Theoretical and Computational Science Summer School** 1 – 26 February 2021 CHPC and NITheP **Introduction to Quantum Computing** October 2020 – May 2021 IBM - The Coding School The Feynman Lectures on Physics Vol. I, II, and III Spring Terms 2017 - 2019 Ozgur Cildiroglu - Ankara University

## TECHNICAL SKILLS

Languages: Python \* MATLAB \* GNU Octave \* Mathematica \* Assembly \* C/C++

**Software**: PennyLane \* Cirq \* Qiskit \* TensorFlow \* Q#/QDK \* AutoCAD

**Hardware**: Raspberry Pi \* Arduino \* RTL-SDR

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Modified Layerwise Learning for Data Re-uploading Classifier in HEP Classification November 2021 IEEE - DOI: 10.1109/QCE52317.2021.00024 Quantum GANs for Higgs boson ttH process Data Generation October 2021 CERN openlab - DOI: 10.5281/zenodo.5577410 An Efficient Optimization Method: Natural Gradient Descent January 2021 Ankara University Department of EEE November 2020 **Estimation of Motion Parameters for Falling Objects** Ankara University Department of EEE CHALLENGES AND HACKATHONS CERN Webfest: Self-supervised learning for wearable sensors data classification August 2021 Bulding Act.App - AI powered app for Healthcare OHack 2021: The Quantum Machine Learning Hackathon - Xanadu February 2021 Second place, winner of the grand CERN internship November 2020 The IBM Quantum Challenge Foundational badge KTHACK2020: Quantum Technologies Hackathon October 2020 The First place prize in Academic/Scientific studies category WORKSHOPS AND CONFERENCES **Q# Trainer Training Program** January – February 2021 Microsoft Azure Quantum Developer Workshop 1 & 2 23 January & 2 February 2021 Microsoft **Global Quantum Programming Workshops** 16 – 28 November 2020 **OWorld** Machine Learning and Transformer Structures in DeepNLP 04 – 11 November 2020 Datacamp'20 – Boğaziçi University **MATLAB Onramp Training** 24 January 2019 MathWorks TEACHING EXPERIENCE Trainer - Q# Quantum computing workshop 20 - 23 May 2021 Microsoft - QTurkey Remote Trainer - Q# Quantum computing workshop 15 - 18 March 2021 Microsoft- QTurkey Remote **Python Lessons** Fall Term 2018 - 2019 Ankara University - Robotics and science society Ankara, Turkey Fall Term 2017 - 2018 Arduino/Raspberry Pi Lessons Ankara University - Robotics and science society Ankara, Turkey LANGUAGES SKILLS English: Reading C1 \* Listening C1 \* Speaking C1 \* Writing C1 **German:** Reading B1 \* Listening B1 \* Speaking B1 \* Writing B1 ACTIVE MEMBERSHIPS