# İdil **Sülo**

Master's Student in Computer Science

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## Education

**Technical University of Munich (TUM)**                                      Munich, GERMANY

M.Sc. in Informatics (Computer Science)                                      October, 2019 - Present

· A graduate student with an emphasis on deep learning and computer vision.
· Currently working on a project on self-supervised vehicle control, and an extension of this project using sensor fusion at **TUM Computer Vision Group**.

**Middle East Technical University (METU)**                                   Ankara, TURKEY

B.Sc. in Computer Engineering                                                September, 2014 - June, 2019

· Studied one year at the English Language Preparatory School of METU.
· **Graduation Project:** DLEM - A project that will make deep learning networks available as an online service and greatly simplify the testing of the existing networks by the users using ONNX format.
· **cGPA:** 3.17/4.0

## Skills

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|---|---|
| **Programming Languages** | Python, C/C++ |
| **Libraries, Frameworks and Tools** | PyTorch, Tensorflow, NumPy, SciPy, Matplotlib, Pandas, OpenCV, Dlib, LaTeX, Git |
| **Operating Systems** | Unix/Linux, Windows |
| **Languages** | Turkish (Native), English (Advanced), German (Intermediate) |

## Experience

**Christie's**                                                               London, United Kingdom

Data Science Intern (Fixed-term)                                             May 3, 2022 - September 30, 2022

· Working on a project on feature extraction from paintings that are stored on the lots of Christie's.

**Amazon Web Services (AWS)**                                                Berlin, GERMANY

Software Development Engineer Intern, AWS AI - DevOps                        August 15, 2021 - January 14, 2022

· Worked on a knowledge base system to manage, sort and categorize a growing amount of entities and their relationships, and to present across DevOps Guru multiple components in a centralized way.

**Unetiq**                                                                   Munich, GERMANY

Data Scientist (Part-Time)                                                   November 11, 2019 - July 1, 2020

· **Ground Control Project:** Developed an environmental project that aims to determine rail track quality by developing neural network models based on sensor readings.
· **Linde Project:** Analyzed the costs of different projects of Linde based on several key quantities such as the plant type, country and execution period.
· **Corona-AI Project:** Worked on the prediction of the mortality status of COVID-19 patients based on the first 24 hours of ICU stay with the data obtained from the patients in University Hospital Regensburg, Germany.

**Darkblue Telecommunication Systems**                                       Ankara, TURKEY

Software Developer                                                           June 11, 2019 - August 1, 2019

· Worked on a research and development project for the implementation of a real-time system using Support Vector Machine (SVM) model to classify face images of the people using C++ and Dlib.

**KOVAN Robotics Research Lab, Middle East Technical University** <span style="color:teal">Ankara, TURKEY</span>

Undergraduate Student Researcher <span style="color:gray">February 1, 2019 - June 30, 2019</span>

- Worked on a project on an "intelligent" robot platform that is developed to function as an apprentice for the human workers working in factory assembly lines under the supervision of **Prof. Sinan Kalkan** and **Prof. Erol Sahin**.
- Developed a module in order to predict the pose of human workers in real-time given the data from Kinect.
- Supported creation of the METU ALET dataset for detecting tools with scenes that introduce several challenges for object detection. In addition, I have worked on a deep neural network model to check whether a human worker is wearing a helmet to demonstrate a possible use-case of our dataset such as safety purposes.
- This work has led to a publication accepted to **ECCV 2020 International Workshop on Assistive Computer Vision and Robotics**.

**City University of New York** <span style="color:teal">New York, NY, United States</span>

Undergraduate Student Researcher (Remote) <span style="color:gray">October 1, 2018 - June 30, 2019</span>

- Worked on a project to apply deep learning methods on the energy consumption data obtained from the buildings that reside in the City University of New York (CUNY) campuses under the supervision of **Prof. Theodore Brown**.
- Developed a recurrent neural network model to help forming of energy efficient smart buildings by predicting their energy consumption.
- This work is supported by the **Scientific and Technological Research Council of Turkey (TÜBİTAK)** through the scope of the **scholarship programme 2209/A University Students Research Project Grant** which I am the recipient of.

**ImageLab, Middle East Technical University** <span style="color:teal">Ankara, TURKEY</span>

Computer Vision Research Intern <span style="color:gray">June 25, 2018 - September 21, 2018</span>

- Participated in a research of reducing the computational cost of GANs inspired by the MobileNet architecture with an application of the Depthwise Separable Convolution layers under the supervision of **Prof. Gokberk Cinbis**.

**CITS Bilisim (Cloud Information Technology Services)** <span style="color:teal">Bursa, TURKEY</span>

Software Development Intern <span style="color:gray">July 3, 2017 - September 22, 2017</span>

- Designed and implemented an algorithm to optimize the problem of cutting large sheets of metals into specific sizes.
- Created a web application which lets the user to create a travel plan on a world map.

# Publications

- F. C. Kurnaz, B. Hocaoglu, K. M. Yilmaz, **I. Sulo**, and S. Kalkan, **"ALET (Automated Labeling of Equipment and Tools): A Dataset for Tool Detection and Human Worker Safety Detection"**, in ECCV 2020 International Workshop on Assistive Computer Vision and Robotics, August 2020.
- **I. Sulo**, S. R. Keskin, G. Dogan, and T. Brown, **"Energy Efficient Smart Buildings: LSTM Neural Networks for Time Series Prediction"**, in The International Conference on Deep Learning and Machine Learning in Emerging Applications (DEEP-ML), August 2019.

# Honors and Awards

- **HackZurich 2021** - Winner of IBM & the Literoom Workshop, "Digitally Enabling the Artist"
- **NeurIPS 2020, ICML 2020, ISMIR 2020** - Conference Grant
- **Scientific and Technological Research Council of Turkey (TÜBİTAK)** - 2209/A University Students Research Project Grant, 2019
- **Middle East Technical University** - Honor Roll (Spring 2015, Fall 2017, Spring 2018), High Honor Roll (Spring 2017, Fall 2018)

# Extracurricular Activity

**Coding Woman [ Website ]**

Blogger <span style="color:gray">January, 2018 - Present</span>

**Django Girls**

Co-Organizer and Mentor <span style="color:gray">October, 2018 - June, 2019</span>