

**CONTACT
INFORMATION**

Email idilsulo@gmail.com
 Web idilsulo.github.io

[Google Scholar](#)

EDUCATION

Technical University of Munich (TUM)

Munich, Germany

M.Sc., Computer Science

2019 - 2023

Master's Thesis – *Compositional Zero-shot Point Cloud Classification with Vision-Language Model Embeddings* at TUM CAMP supervised by PD Dr. Federico Tombari.

Middle East Technical University (METU)

Ankara, Turkey

B.Sc., Computer Engineering

2014 - 2019

Studied one year at the English Language Preparatory School of METU.

PUBLICATIONS

- [1] **İdil Sulo**, Evin Pinar Ornek, Nassir Navab, and Federico Tombari, OpenPart: Compositional Open Vocabulary Point Cloud Understanding, *Under review*, 2023.
- [2] Qadeer Khan, **İdil Sulo**, Melis Ocal, and Daniel Cremers, Learning Vision Based Autonomous Lateral Vehicle Control Without Supervision, *Applied Intelligence, Springer*, 2023. [Paper].
- [3] Fatih Can Kurnaz, Burak Hocaoglu, Mert Kaan Yilmaz, **İdil Sulo**, and Sinan Kalkan, ALET (Automated Labeling of Equipment and Tools): A Dataset for Tool Detection and Human Worker Safety Detection”, *European Conference on Computer Vision (ECCV) Workshops*, 2020. [Paper].
- [4] **İdil Sulo**, Seref Recep Keskin, Gulustan Dogan, and Theodore 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)*, 2019. [Paper].

**RESEARCH
EXPERIENCE**

Massachusetts Institute of Technology

Cambridge, MA, United States

MIT Summer Geometry Initiative (SGI) Fellow

Jul 8, 2024 - Aug 16, 2024

Computer Vision Group, Technical University of Munich

Munich, Germany

Student Researcher

Apr 1, 2021 - Feb 28, 2023

- Performed self-supervised imitation learning for vehicle control based on pose estimation (SLAM), view synthesis and Model Predictive Control under the supervision of Prof. Daniel Cremers.
- Extended the framework to multiple sensor modalities to study robustness to sensor failures.
- Published at Applied Intelligence journal.

KOVAN Robotics Research Lab, METU

Ankara, Turkey

Undergraduate Student Researcher

Feb 1, 2019 - Jun 30, 2019

- Worked on an intelligent robot platform that functions as an apprentice to human workers working in factory assembly lines co-supervised by Prof. Sinan Kalkan and Prof. Erol Sahin.
- Developed a module to predict the pose of human workers in real-time from Kinect data.
- Supported creation of a tool detection dataset and trained a neural network model to demonstrate a possible use-case of the dataset for safety purposes.
- Published at ECCV 2020 Workshops.

City University of New York

New York, NY, United States (Remote)

Undergraduate Student Researcher

Oct 1, 2018 - Jun 30, 2019

- Enabled forming of smart buildings by predicting their energy consumption using LSTM.

ImageLab, Middle East Technical University

Ankara, Turkey

Computer Vision Research Intern

Jun 25, 2018 - Sep 21, 2018

- Helped reducing the computational cost of GANs (e.g. WGAN) with Depthwise Separable Convolution layers of MobileNet architecture under the supervision of Prof. Gokberk Cinbis.

| | | |
|---|--|--|
| INDUSTRY EXPERIENCE | Deltia <i>Computer Vision Engineer Intern</i> | Berlin, Germany (Remote) Feb 1, 2024 - Present |
| | <ul style="list-style-type: none"> – Working on a smart ergonomics project based on human pose estimation to ensure workers health and safety in the long-term. | |
| | Christie's <i>Data Science Intern</i> | London, United Kingdom (Remote) May 3, 2022 - Sep 30, 2022 |
| | <ul style="list-style-type: none"> – Performed ablation studies on cross-modal tasks such as image captioning, visual question answering and visual grounding for visual arts. – Fine-tuned of vision-language models (e.g. BLIP and OFA-Sys). | |
| | Amazon Web Services (AWS) <i>Software Development Engineer Intern, AWS AI - DevOps</i> | Berlin, Germany Aug 15, 2021 - Jan 14, 2022 |
| | <ul style="list-style-type: none"> – Established a knowledge base system to manage, sort and categorize a growing amount of entities and their relationships to present in a centralized way. – Collaborated with research scientist to deploy NLP models. | |
| | Unetiq <i>Data Scientist (Part-time)</i> | Munich, Germany Nov 11, 2019 - Jul 1, 2020 |
| | <ul style="list-style-type: none"> – Supported customers with project-based AI solutions by developing neural networks for quality estimation and health status prediction. – Analyzed customer data to provide project cost estimation. | |
| AWARDS & SERVICES | CVPR – Reviewer CVPR 2023, NeurIPS 2020, ICML 2020, ISMIR 2020 – Conference Grant Scientific and Technological Research Council of Turkey (TÜBİTAK) – 2209/A University Students Research Project Grant, 2019 Grace Hopper Celebration 2022 (vGHC'22) – IFF Gender & Diversity Grants, Technical University of Munich HackZurich 2021 – Winner of IBM & the Literoom Workshop, “Digitally Enabling the Artist” Guinness World Record – Participant of the “Largest Code Debugging / Bug Fixing Competition” | |
| SKILLS | Programming Languages – Python, C/C++ Libraries, Frameworks and Tools – Python Data Science/Deep Learning Stack (PyTorch, NumPy, SciPy, scikit-learn, Matplotlib, Pandas, Jupyter); 2D/3D Computer Vision (OpenCV, CARLA, Open3D, PyTorch3D); Cloud Technologies (AWS, Google Cloud, Azure); Web Technologies (HTML, CSS, Jekyll); CUDA, L ^A T _E X, Git Operating Systems – Unix/Linux, Windows Languages – Turkish (Native), English (Advanced), German (Intermediate) | |
| EXTRA- CURRICULAR ACTIVITIES | Women in CS @ TUM (Informatik-Forum Frauen, IFF) <i>Events Team Lead</i> | Munich, Germany Apr 2022 - Present |
| | Django Girls <i>Organizer & Mentor</i> | Ankara, Turkey 2018 |
| | Coding Woman <i>Blogger</i> | Jan 2018 - Present |