

Curriculum Vitae

Okan KÖPÜKLÜ

✉ okan.kopuklu@tum.de

📄 [Google scholar](#)

🐙 [Github](#)



Personal Data

Birthday/Place 26.05.1990 in Turkey

Address Munich - Germany

Education



Technical University Munich, Germany

Nov 17 – Present

Ph.D. in Electrical and Computer Engineering
Supervised by Prof. Gerhard Rigoll

- Video Action/Activity Recognition
- Hand Gesture Recognition
- Spatiotemporal Action Localization



Technical University Munich, Germany

Sep 14 – Feb 17

M.Sc. in Communications Engineering - Average 3.7 / 4.0
Graduation with high distinction - Average 3.7 / 4.0



Bogazici University, Istanbul, Turkey

Sep 10 – Jun 14

B.Sc. in Electrical and Electronics Engineering
Graduation with high honor degree - Average 3.7 / 4.0

Working Experience



Software Developer at Rysta GmbH, Munich, Germany

Mar 17 - Nov 17

Pattern recognition on resource-constrained IoT devices



Master's Thesis at BMW Group, Munich, Germany

Jun 16 - Jan 17

Improved Worst-Case Response Time (WCRT) Calculation and Input Modeling of Event-Driven Activations for In-Car Com. Networks



Working Student at Intel IoT Ignition Lab, Munich, Germany

Jan 15 - Jun 16

Smart Grid Load Forecast Analysis with Machine Learning Models
POCs with Intel development boards and gateways
Application Development with C, C++ APIs on IoTivity



Working Student at Intel IoT Ignition Lab, Istanbul, Turkey

Apr 14 - Oct 14

Architecture Design and implementation of IoT Demos
Embedded Software Applications with Intel Edison and Galileo Boards

Teaching

Pattern Recognition : Master's Level - 2019, 2020

Selected Publications

- **Driver Anomaly Detection: A Dataset and Contrastive Learning Approach**
O Köpüklü, Jiapeng Zheng, Hang Xu, Gerhard Rigoll
Preprint arXiv: 2009.14660, 2020
- **DriverMHG: A Multi-Modal Dataset for Dynamic Recognition of Driver Micro Hand Gestures and a Real-Time Recognition Framework**
Okan Köpüklü, Thomas Ledwon, Yao Rong, Neslihan Kose, Gerhard Rigoll
International Conference on Automatic Face & Gesture Recognition, FG, 2020
- **You Only Watch Once: A Unified CNN Architecture for Real-Time Spatiotemporal Action Localization**
Okan Köpüklü, Xiangyu Wei, Gerhard Rigoll
Preprint arXiv: 1911.06644, 2019
- **Real-time Hand Gesture Detection and Classification Using Convolutional Neural Networks**
Okan Köpüklü, Ahmet Gunduz, Neslihan Kose, Gerhard Rigoll
Best student paper award
International Conference on Automatic Face & Gesture Recognition, FG, 2019
- **Resource Efficient 3D Convolutional Neural Networks**
Okan Köpüklü, Neslihan Kose, Ahmet Gunduz, Gerhard Rigoll
Neural Architectures Workshop, ICCVW, 2019
- **Talking with Your Hands: Scaling Hand Gestures and Recognition with CNNs**
Okan Köpüklü, Yao Rong, Gerhard Rigoll
Workshop on Observing and Understanding Hands in Action, ICCVW, 2019
- **Convolutional Neural Networks with Layer Reuse**
Okan Köpüklü, Maryam Babaei, Stefan Hörmann, Gerhard Rigoll
International Conference on Image Processing (ICIP), ICIP, 2019
- **Motion Fused Frames: Data Level Fusion Strategy for Hand Gesture Recognition**
Okan Köpüklü, Yao Rong, Gerhard Rigoll
Workshop on Analysis and Modeling of Faces and Gestures, CVPRW, 2018

Achievements

- Best student paper award – FG 2019
- Several degrees in Triathlon contests between 2008 - 2011 in Turkey
- Several oil painting exhibitions between 2004 - 2008

Skills & Language

Programming : Python, C/C++, Matlab

Deep Learning Platforms : PyTorch, Torch, TensorFlow

Libraries : Numpy, Scipy, Scikit-Learn, OpenCV, Intel RealSense SDK, Kinect SDK

Languages : Turkish (native), English (fluent), German (intermediate)