# Mert Kilickaya

Computer Vision and Machine Learning Researcher. Interests: Self-Supervised Learning, Continual Learning, Object Detection, Vision & Language.

# Experience

23 Researcher - <b>TU Eindhoven</b> - Netherlands
Conducting research on self-supervised continual learning
21 Research Intern - <b>Huawei</b> - Finland
Conducted research on visual search engine   Published a US Patent
22 Graduate Research Assistant - <b>University of Amsterdam</b> - Netherlands
Conducted research on visual action recognition   Published at BMVC, WACV
16 Graduate Research Assistant - <b>Hacettepe University</b> - Turkey

Conducted research on vision and language | Published at EACL

## Education

2017 - 2022 **PhD Computer Vision** - University of Amsterdam - Netherlands
Action Recognition • Visual Retrieval • Human-object Interactions
Thesis: Contextual Understanding of Visual Interactions
Advisor: Prof. Arnold Smeulders

2013 - 2016 **MSc Computer Vision** - Hacettepe University - Turkey Computer Vision • Vision and Language

Thesis: Visual Importance with Applications to Vision and Language

Advisor: Prof. Nazli Ikizler-Cinbis

## **Publications**

### **Selected Papers**

2023	Locality Aware Hyperspectral Imaging - BMVC
	F. Zhou, M. Kilickaya and J. Vanschoren

- Towards Label-Efficient Incremental Learning: A Survey ArXiv
   M. Kilickaya, J. van de Weijer and Y. M. Asano
- 2023 Are Labels Needed for Incremental Instance Learning? CVPRW (Oral) M. Kilickaya and J. Vanschoren
- 2021 Human-object Interaction Detection via Weak Supervision BMVCM. Kilickaya and A.W.M. Smeulders
- 2020 Structured Visual Search via Composition-aware Learning *WACV* M. Kilickaya and A.W.M. Smeulders
- 2020 Self-Selective Context for Interaction Recognition *ICPR*M. Kilickaya, N. Hussein, E. Gavves and A.W.M. Smeulders
- 2017 Re-evaluating Automatic Metrics for Image Captioning *EACL (Oral)*M. Kilickaya, A. Erdem, N. Ikizler-Cinbis, E. Erdem

## **Patents**

- 2022 Visual Search via Conversational Interaction (Con-VIS) Huawei Ref. 92005865
- 2021 Network For Interacted Object Localization Qualcomm Ref. 206518
- 2020 Context-driven Learning of Human-object Interactions Qualcomm Ref. 200249GR1
- 2019 Subject-object Interaction Recognition Model US 20200302232A1

#### Technical Skills

**Platforms** (proficient): PyTorch, TensorFlow, (familiar): HuggingFace **Scientific** (proficient): OpenCV, Scikit-Learn, SciPy, Pandas, Numpy **Languages** (proficient): Python (familiar): HTML/CSS, C/C++

#### Miscellaneous

**Grants** TL150k grant from the Scientific Council to start-up our Visual Analytics Platform, 2016 - Turkey \$20k grant from the Scientific Council of Quebec for research internship, 2014 - Canada

**Reviewer** *IEEE ToM, EMNLP (21, 22, 23), ACL (23), ICML (23), NeurIPS (23).*