

Computer vision researcher interested in building self-improving autonomous learners. I currently work as a Post-doc at Eindhoven University of Technology. I obtained my PhD from the University of Amsterdam.

Experience

- 2022 - 2023 Post-doc Researcher - **TU Eindhoven** - Netherlands
Conduct research on continual learning
- 2020 - 2021 Research Intern - **Huawei** - Finland
Conduct research on visual search | Patent pending | Improved Huawei Petal Search Engine
- 2017 - 2022 Graduate Research Assistant - **University of Amsterdam** - Netherlands
Conduct research on visual interactions | Published at BMVC, WACV
- 2013 - 2016 Graduate Research Assistant - **Hacettepe University** - Turkey
Conduct research on vision and language | Published at EACL

Education

- 2022 - 2023 **Post-doc Machine Learning** - TU Eindhoven - Netherlands
Self-Supervised Learning • Incremental Learning
- 2017 - 2022 **PhD Computer Vision** - University of Amsterdam - Netherlands
Action Recognition • Visual Retrieval • Multi-modal Learning • Human-object Interactions
Thesis: Contextual Understanding of Visual Interactions
Advisor: Prof. Arnold Smeulders
- 2013 - 2016 **MSc Computer Vision** - Hacettepe University - Turkey
Computer Vision • Machine Learning • Data Science
Thesis: Visual Importance with Applications to Vision and Language
Advisor: Prof. Nazli Ikizler-Cinbis

Publications

Selected Papers

- 2023 Towards Label-Efficient Incremental Learning: A Survey - *ArXiv*
M. Kilickaya, Joost van de Weijer and Yuki M. Asano
- 2023 Are Labels Needed for Incremental Instance Learning? - *ArXiv*
M. Kilickaya and Joaquin Vanschoren
- 2021 Human-object Interaction Detection via Weak Supervision - *BMVC*
M. Kilickaya and A.W.M. Smeulders
- 2020 Structured Visual Search via Composition-aware Learning - *WACV*
M. Kilickaya and A.W.M. Smeulders
M. Kilickaya, N. Hussein, E. Gavves and A.W.M. Smeulders
- 2017 Re-evaluating Automatic Metrics for Image Captioning - *ACL (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, Keras, (*familiar*): Gensim, Spacy
- Scientific** (*proficient*): OpenCV, Scikit-Image, Scikit-Learn, SciPy, Pandas, Numpy
- Languages** (*proficient*): Python, Matlab (*familiar*): HTML/CSS, C/C++
- Coding** object-oriented, algorithms, data structures, version control

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, ACL, ICML.*