Mert Kilickaya

Post-doc in Machine (Meta) Learning from TU Eindhoven. Previously PhD in Computer Vision from the University of Amsterdam. I am experienced in visual recognition, detection and search of human actions and interactions.

Experience

2022 - 2023 Graduate Research Assistant - TU Eindhoven - Netherlands

Conduct research on meta learning and 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

Meta 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

Under Submissions

- 2022 Visual Image Search-by-Dots
- 2022 Visual Inter-Former for Novel Interaction Understanding

Selected Papers

2021 Human-object Interaction Detection w/o Alignment 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

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 - 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, CVPR, ICCV, ECCV