# Mert Kilickaya

PhD in Deep Learning with expertise in Computer Vision, Self-Supervised Learning, and Efficient Learning. Proven track record in developing new models, contributing to 4 patents and over 10 publications. Seeking to leverage strong research acumen to drive innovation as an industrial Research Scientist.

# Experience

Deep Learning Researcher - <b>Agendia</b> - Netherlands
Large Vision Models & Generative AI for Pathology
Postdoc Researcher - TU Eindhoven - Netherlands
Self-supervised Learning & Efficient Learning
Research Scientist Intern - <b>Huawei</b> - Finland
Visual Image Search
Graduate Research Assistant - <b>Qualcomm (QUVA) Labs</b> - Netherlands
Action and Object Detection
Graduate Research Assistant - <b>Hacettepe University</b> - Turkey
Vision-and-Language Models

#### Education

2017 - 2022 **PhD Deep Learning** - University of Amsterdam - Netherlands Computer Vision • Object Detection • Scene Understanding Thesis: Contextual Understanding of Visual Interactions

Advisor: Prof. Arnold Smeulders

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

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 - WACVM. Kilickaya 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, Jax 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** ECCV (24), EMNLP (21, 22, 23), ACL (23), ICML (23, 24), NeurIPS (23, 24), ICLR (23, 24).