# **Hazel Doughty**

hazeldoughty.github.io hazel.doughty@uva.nl

#### RESEARCH FOCUS

My research focus is fine-grained video understanding with limited labeled data. Particularly I have explored challenging problems including assessing skill in video, recognizing adverbs, weak-supervision from narrations domain adaptation, self-supervision and learning video-text embeddings.

#### **EMPLOYMENT**

Post-Doctoral Researcher in Computer Vision (Dec 2020-Present) Informatics Institute, University of Amsterdam Working with Prof. Cees Snoek and 3 PhD students on topics in video understanding, including action recognition, self-supervised learning, multi-modal learning, open-set recognition and domain adaptation.

#### **EDUCATION**

# PhD in Computer Vision (Sep 2016-Sep 2020)

Department of Computer Science, University of Bristol

Supervisors: Prof. Walterio Mayol-Cuevas, Prof. Dima Damen

Thesis: Skill Determination from Long Videos

EPSRC DTP Funding

EPSRC Project Glance (EP/N013964/1)

## MEng in Computer Science (2012-2016)

Department of Computer Science, University of Bristol

First Class - Top Ranked Graduate

### **PUBLICATIONS**

How Severe is Benchmark-Sensitivity in Video Self-Supervised Learning? Fida Mohammad Thoker, <u>Hazel Doughty</u>, Piyush Bagad and Cees G. M. Snoek European Conference on Computer Vision (ECCV), 2022

How Do You Do It? Fine-Grained Action Understanding with Pseudo-Adverbs Hazel Doughty and Cees G. M. Snoek

Conference on Computer Vision and Pattern Recognition (CVPR), 2022

Audio-Adaptive Activity Recognition Across Video Domains Yunhua Zhang, <u>Hazel Doughty</u>, Ling Shao and Cees G. M. Snoek Conference on Computer Vision and Pattern Recognition (CVPR), 2022

Rescaling Egocentric Vision: Collection, Pipeline and Challenges for EPIC-KITCHENS-100

Dima Damen, <u>Hazel Doughty</u>, Giovanni Maria Farinella, Antonino Furnari, Evangelos Kazakos, Jian Ma, Davide Moltisanti, Jonathan Munro, Toby Perrett, Will Price, Michael Wray.

Interational Journal of Computer Vision (IJCV), 2021

Skeleton-Contrastive 3D Action Representation Learning Fida Mohammad Thoker, <u>Hazel Doughty</u>, Cees Snoek ACM International Conference on Multimedia, 2021

On Semantic Similarity in Video Retrieval Michael Wray, Hazel Doughty, Dima Damen

Conference on Computer Vision and Pattern Recognition (CVPR), 2021

The EPIC-KITCHENS Dataset: Collection, Challenges and Baselines Dima Damen, Hazel Doughty, Giovanni Farinella, Sanja Fidler,

Antonino Furnari, Evangelos Kazakos, Davide Moltisanti, Jonathan Munro,

Toby Perrett, Will Price, Michael Wray

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2020

Action Modifiers: Learning from Adverbs in Instructional Videos Hazel Doughty, Ivan Laptev, Walterio Mayol-Cuevas, Dima Damen Conference on Computer Vision and Pattern Recognition (CVPR), 2020

The Pros and Cons: Rank-aware Temporal Attention for Skill Determination in Long Videos

Hazel Doughty, Walterio Mayol-Cuevas, Dima Damen

Conference on Computer Vision and Pattern Recognition (CVPR), 2019

Scaling Egocentric Vision: The EPIC-Kitchens Dataset

Dima Damen, <u>Hazel Doughty</u>, Giovanni Maria Farinella, Sanja Fidler, Antonino Furnari, <u>Evangelos Kazakos</u>, Davide Moltisanti, Jonathan Munro, Toby Perrett, Will Price, Michael Wray

European Conference on Computer Vision (ECCV) 2018

Who's Better? Who's Best? Pairwise Deep Ranking for Skill Determination

Hazel Doughty, Dima Damen, Walterio Mayol-Cuevas

Conference on Computer Vision and Pattern Recognition (CVPR), 2018

PUBLIC DATASETS

EPIC-Kitchens http://epic-kitchens.github.io/

Bristol Everyday Skill Tasks (BEST)

https://github.com/hazeld/rank-aware-attention-network

EPIC-Skills https://dimadamen.github.io/Skill/

**INTERNSHIPS** 

2019 Research visit to INRIA Willow (Paris), working with Prof. Ivan Laptev

2015 Interdisciplinary Research Internship, University of Bristol,

working with Prof. Ute Leonards

2014 Research Internship, Interaction and Graphics Group, University of Bristol

AWARDS, HONOURS, DISTINCTIONS Outstanding Reviewer: ECCV 2022, CVPR 2021, ICCV 2021,

ECCV 2020, ACCV 2020

Doctoral Training Programme Funding (2016-2020)

Top Graduating MEng Student, Department of Computer Science (2016) Best Research MEng Project, Department of Computer Science (2016)

REVIEWING DUTIES

CVPR 2020-2023, ICCV 2019-2021, ECCV 2020-2022, TPAMI 2020-2022,

IJCV 2020-2022, NeurIPS 2022, ICLR 2021, AAAI 2020,

WACV 2021-2022, ACCV 2020

**ORGANIZATION** 

Netherlands Conference on Computer Vision, 2022

Workshop on Pre-registration in ML, NeurIPS 2021

Structured Representations for Video Understanding Workshop, ICCV 2021

Women in Computer Vision Workshop, CVPR 2020 Egocentric Perception, Interaction and Computing

Workshop, CVPR 2020 and ECCV 2020

INVITED TALKS & PANELS

**TEACHING** 

Guest Lecture, University of Catania, 2022

Video Understanding Symposium, Amsterdam, 2022 Women in Computer Vision Panel, CVPR, 2022 Computer Vision by Learning, ASCI Course, 2022

Guest Lecture in Computer Vision II, University of Amsterdam, 2021

AI in Robotics Seminar, University of Toronto, 2021

Video Pentathlon Workshop, CVPR, 2020 Microsoft Research, Cambridge, 2019 EPIC Workshop, ICCV, 2017

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Informatics Institute, University of Amsterdam

Leren & Beslissen (English: Learning and Decision Making)

Teaching Assistant, 2016-2020

Unit Director, 2022

Department of Computer Science University of Bristol

Multiple undergraduate Computer Science courses including: Data Structures

and Algorithms (Y2), Symbols, Patterns and Signals (Y2), Advanced Algorithms (Y3), Applied Deep Learning (Y4)