

GURKIRT SINGH

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EDUCATION & EXPERIENCE

Borealis AI, Canada Research Intern; Supervised by Greg Mori & Leonid Sigal	<i>Feb. 2019 - May 2019</i>
Disney Research, USA R&D Lab Associate (Research Intern); Supervised by Leonid Sigal & Andreas Lehrmann	<i>Feb. 2017 - Jul. 2017</i>
Oxford Brookes University, UK Ph.D in Computing and Maths; Supervised by Fabio Cuzzolin	<i>Sep. 2015 - Nov. 2019</i>
Siemens Corporate Research, India Research Engineer	<i>Oct. 2013 - Aug. 2015</i>
INRIA, France Research Intern promoted to Research Engineer; Supervised by Radu Horaud & Georgios Evangelidis	<i>Feb. 2013 - Sept. 2013</i>
Institut Polytechnique de Grenoble, France MSc in Informatics at ENSIMAG; Supervised by Radu Horaud & Georgios Evangelidis	<i>Sep. 2012 - Jun. 2013</i>
University of Edinburgh, UK Research Intern; Supervised by Bob Fisher	<i>Jan. 2010 - May 2010</i>
VIT University, Vellore, India B.Tech; Supervised by Bob Fisher & Arulmozhivarman Pachiyappan	<i>Aug. 2006 - May 2010</i>

RESEARCH INTERESTS

Computer Vision Causal Representation Learning, Video Feature Learning,
Spatiotemporal Action Detection, Action Prediction

SELECTED PUBLICATIONS

An End-to-End Baseline for Video Captioning

Silvio Olivastri, **Gurkirt Singh** and Fabio Cuzzolin

Preprint arXiv: 1904.02628, 2019

Recurrence to the Rescue: Towards Causal Spatiotemporal Representations

Gurkirt Singh and Fabio Cuzzolin

Preprint arXiv: 1811.07157, 2018

Action Detection from a Robot-Car Perspective

Gurkirt Singh*, Stephen Akrigg*, Valentina Fontana*, Manuele Di Maio, Suman Saha, Fabio Cuzzolin

Preprint arXiv: 1807.11332, 2018

TraMNet - Transition Matrix Network for Efficient Action Tube Proposals

Gurkirt Singh, Suman Saha and Fabio Cuzzolin

Asian Conference on Computer Vision (ACCV), 2018

Online Real-time Multiple Spatiotemporal Action Localisation and Prediction

Gurkirt Singh, Suman Saha, Michael Sapienza, Philip Torr and Fabio Cuzzolin

International Conference on Computer Vision (ICCV), 2017

AMTnet: Action-Micro-Tube Regression by end-to-end Trainable Deep Architecture

Suman Saha, **Gurkirt Singh** and Fabio Cuzzolin

International Conference on Computer Vision (ICCV), 2017

Deep Learning for Detecting Multiple Space-Time Action Tubes in Videos

Suman Saha, **Gurkirt Singh**, Michael Sapienza, Philip Torr and Fabio Cuzzolin

British Machine Vision Conference (BMVC), 2016

Skeletal Quads: Human action recognition using joint quadruples

Georgios Evangelidis, **Gurkirt Singh**, Radu Horaud

International Conference on Pattern Recognition Vision (ICPR), 2014

Incremental Tube Construction for Human Action Detection

Harkirat Behl, Michael Sapienza **Gurkirt Singh**, Suman Saha, Fabio Cuzzolin and Philip Torr
British Machine Vision Conference (BMVC), 2018

Predicting Action Tubes

Gurkirt Singh, Suman Saha and Fabio Cuzzolin
Anticipating Human Behavior (ECCV Workshop), 2018

Untrimmed Video Classification for Activity Detection: Submission to ActivityNet Challenge

Gurkirt Singh and Fabio Cuzzolin,
ActivityNet challenge (CVPR workshop) 2016

Continuous Gesture Recognition from Articulated Poses

Georgios Evangelidis, **Gurkirt Singh**, Radu Horaud
Chalearn Looking at People (ECCV workshop), 2014

CONTESTS & CHALLENGES

Charades-2017: Acton Recognition and Segmentation tasks (Rank: 2/10 and 3/6)	2017
ActivityNet-2017: Classification tasks (Rank 3/29)	2017
ActivityNet-2016: Classification and Detection tasks (Rank 10/24 and 2/6)	2016
Chalearn 2014: Looking at People Challenge (Gesture Detection Task Rank 7/17)	2014

SKILLS

Programming: Python, Matlab, C/C++, Lua

Deep Learning Platforms: PyTorch, Torch, Caffe, TensorFlow

Libraries: Numpy, Scipy, Scikit-Learn, OpenCV, Eigen, Kinect SDK

Operating Systems: Linux, macOS, Windows

TEACHING EXPERIENCE

Machine Learning: Teaching Assistant (Postgraduate)	2018
Computer Vision and Machine Learning: Guest lecturer (Postgraduate)	2016, 2017, 2018
Understanding Programming: Lab Assistant (Undergraduate)	2015, 2016

REVIEWER

TPAMI 2018, ICCV 2019, CVPR 2018, BMVC 2019, IJCIA 2017, 2018, 2019

MORE INFORMATION

Google Scholar: <https://scholar.google.com/citations?user=w8XHUMIAAAAJ&hl=en>

Homepage: <http://gurkirt.github.io/>

Github: <https://github.com/gurkirt>

LinkdIn: <https://www.linkedin.com/in/gurkirt/>