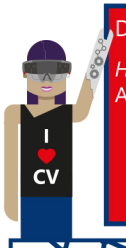
Machine perception of three-dimensional solids

Roberts
OEIP 1962

Total citations	2310
Citations per year	42
Equations per page	0.58
Oldest citation*	1950
Self citations	2
Dataset size ($\log_{10}$)	0.6

*earliest year wins



Determining optical flow

Horn, Schunck
AI 1981

Total citations	12485
Citations per year	347
Equations per page	1.42
Oldest citation*	1950
Self citations	1
Dataset size ($\log_{10}$)	1.3

*earliest year wins

An iterative image registration technique with an application to stereo vision

Lucas, Kanade
IJCAI 1981

Total citations	11935
Citations per year	332
Equations per page	4.67
Oldest citation*	1972
Self citations	0
Dataset size ($\log_{10}$)	0.3

*earliest year wins

A computational approach to edge detection

Canny
PAMI 1986

Total citations	27003
Citations per year	871
Equations per page	3.2
Oldest citation*	1945
Self citations	1
Dataset size ($\log_{10}$)	0.5

*earliest year wins

Snakes: Active contour models

Kass, Witkin, Terzopoulos
IJCV 1988

Total citations	20811
Citations per year	718
Equations per page	1.82
Oldest citation*	1963
Self citations	4
Dataset size ($\log_{10}$)	1.8

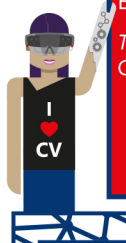
*earliest year wins

Scale-space and edge detection using anisotropic diffusion

Perona, Malik
PAMI 1990

Total citations	12320
Citations per year	456
Equations per page	2.91
Oldest citation*	1740
Self citations	3
Dataset size ($\log_{10}$)	0.3

*earliest year wins



Eigenfaces for recognition

Turk, Pentland
CVPR 1991

Total citations	22567
Citations per year	868
Equations per page	0.94
Oldest citation*	1966
Self citations	0
Dataset size ($\log_{10}$)	3.4

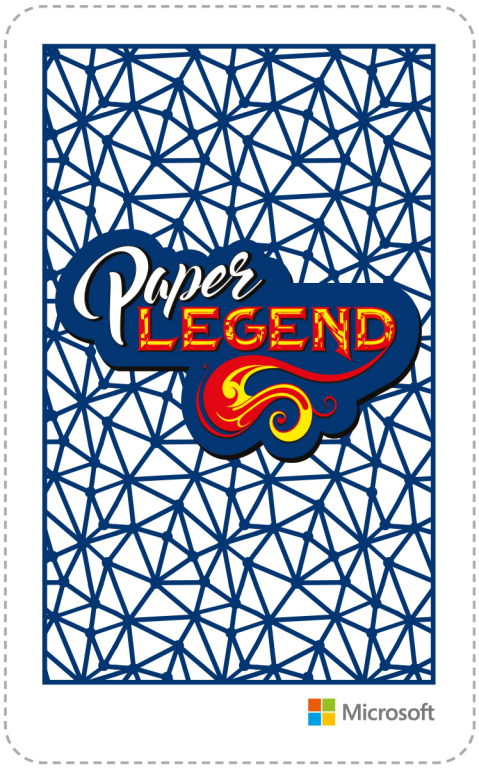
*earliest year wins

Good features to track

Shi, Tomasi
CVPR 1994

Total citations	7918
Citations per year	344
Equations per page	1.75
Oldest citation*	1974
Self citations	1
Dataset size ($\log_{10}$)	1.7

*earliest year wins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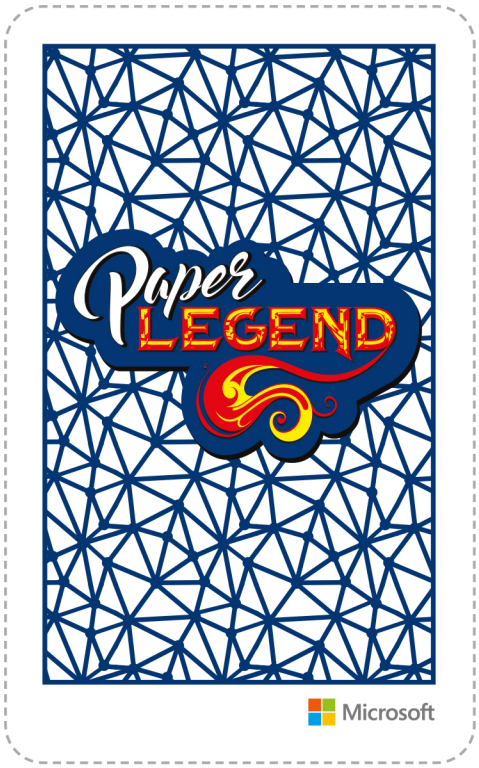
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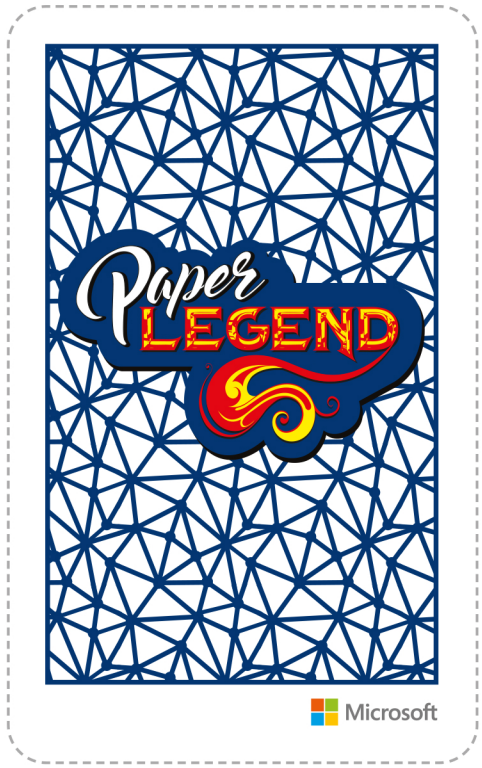
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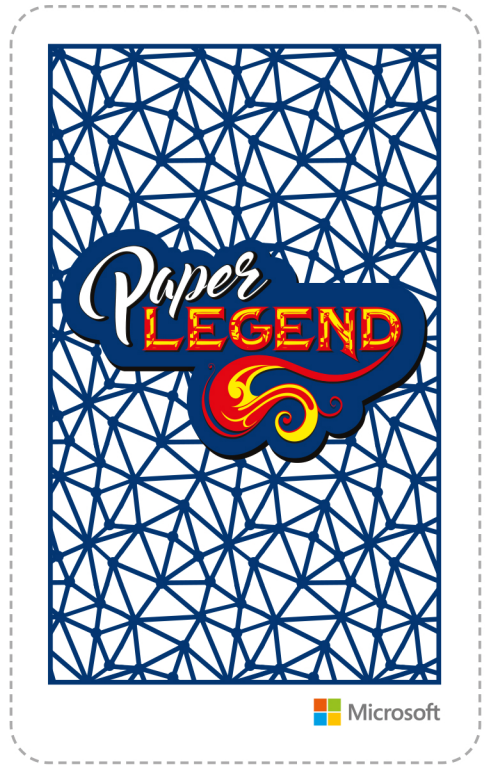
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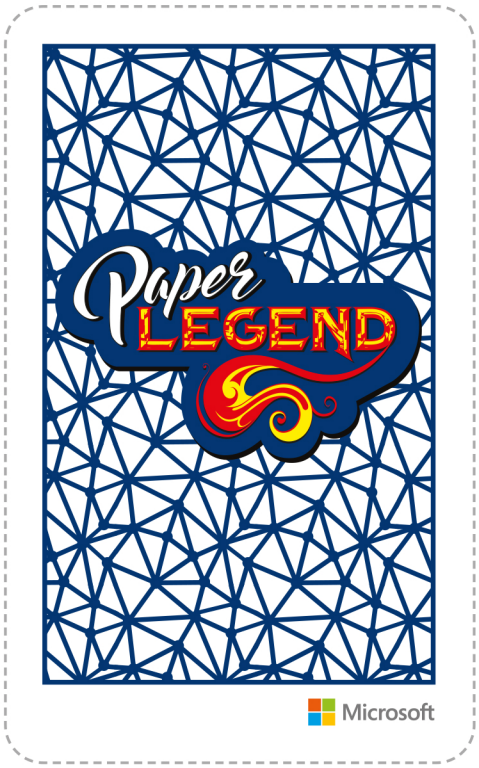
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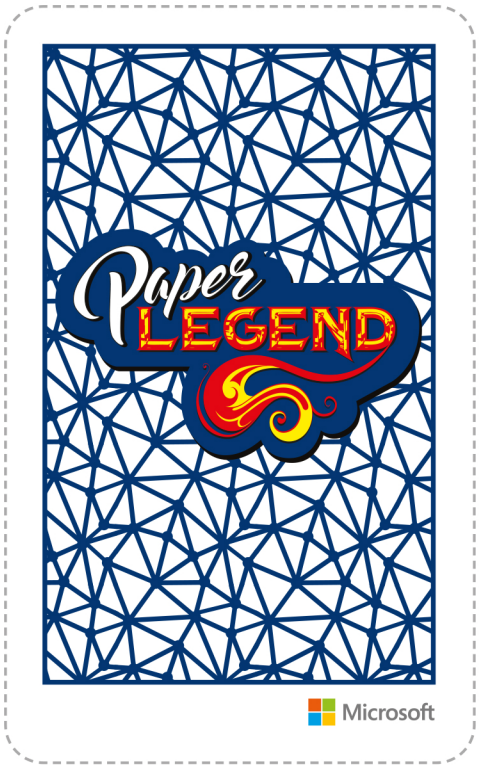
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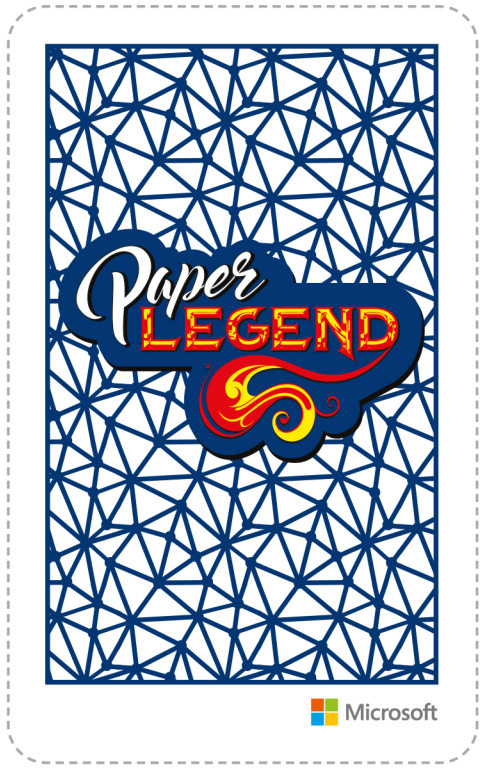
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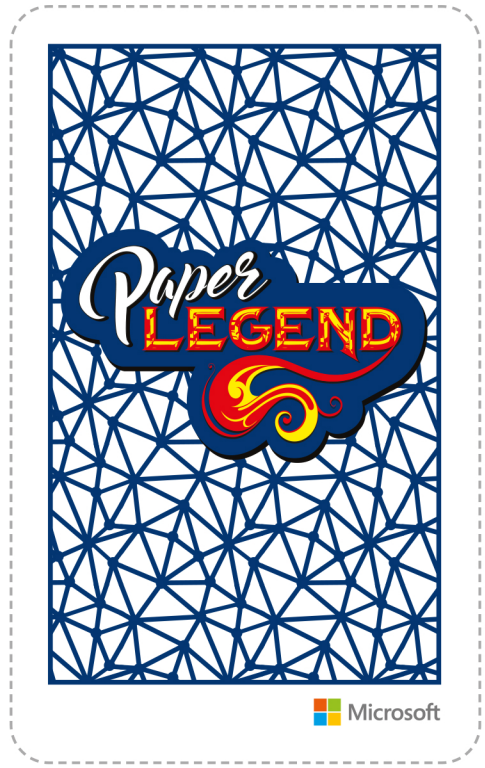
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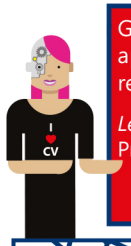


Gradient-based learning applied to document recognition

LeCun, Bottou, Bengio, Haffner
Proc. IEEE 1998

Total citations	7827
Citations per year	412
Equations per page	0.59
Oldest citation*	1961
Self citations	40
Dataset size ($\log_{10}$)	9.0

*earliest year wins

Active appearance models

Cootes, Edwards, Taylor
ECCV 1998

Total citations	7628
Citations per year	401
Equations per page	0.81
Oldest citation*	1989
Self citations	6
Dataset size ($\log_{10}$)	2.3

*earliest year wins

A combined corner and edge detector

Harris, Stephens
BMVC 1998

Total citations	14024
Citations per year	738
Equations per page	2
Oldest citation*	1980
Self citations	2
Dataset size ($\log_{10}$)	0.5

*earliest year wins

Bundle adjustment — a modern synthesis

Triggs, McLauchlan, Hartley, Fitzgibbon
VisAlgs 1999

Total citations	3172
Citations per year	176
Equations per page	0.79
Oldest citation*	1757
Self citations	16
Dataset size ($\log_{10}$)	-∞

*earliest year wins

Texture synthesis by non-parametric sampling

Efros, Leung
ICCV 1999

Total citations	3030
Citations per year	168
Equations per page	0.13
Oldest citation*	1948
Self citations	0
Dataset size ($\log_{10}$)	1.1

*earliest year wins

Normalized cuts and image segmentation

Shi, Malik
PAMI 2000

Total citations	13200
Citations per year	776
Equations per page	2.28
Oldest citation*	1938
Self citations	4
Dataset size ($\log_{10}$)	1.8

*earliest year wins

Modeling the shape of the scene: A holistic representation of the spatial envelope

Oliva, Torralba
IJCV 2001

Total citations	4847
Citations per year	303
Equations per page	0.68
Oldest citation*	1968
Self citations	8
Dataset size ($\log_{10}$)	3.9

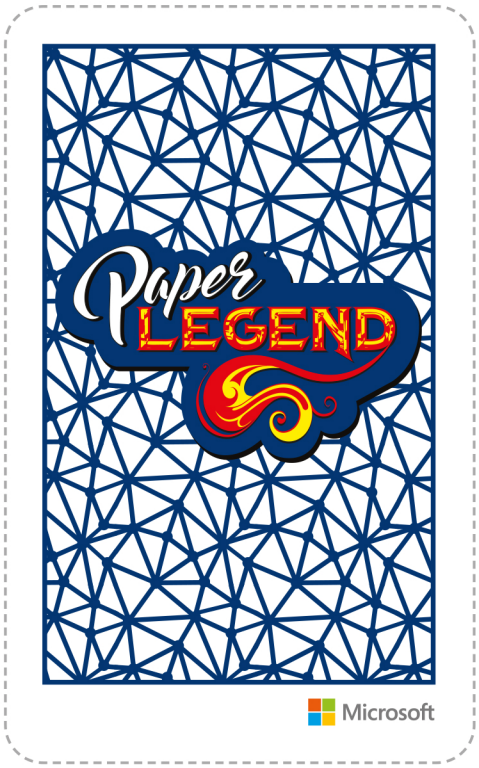
*earliest year wins

Rapid object detection using a boosted cascade of simple features

Viola, Jones
CVPR 2001

Total citations	15176
Citations per year	949
Equations per page	0.88
Oldest citation*	1984
Self citations	0
Dataset size ($\log_{10}$)	2.1

*earliest year wins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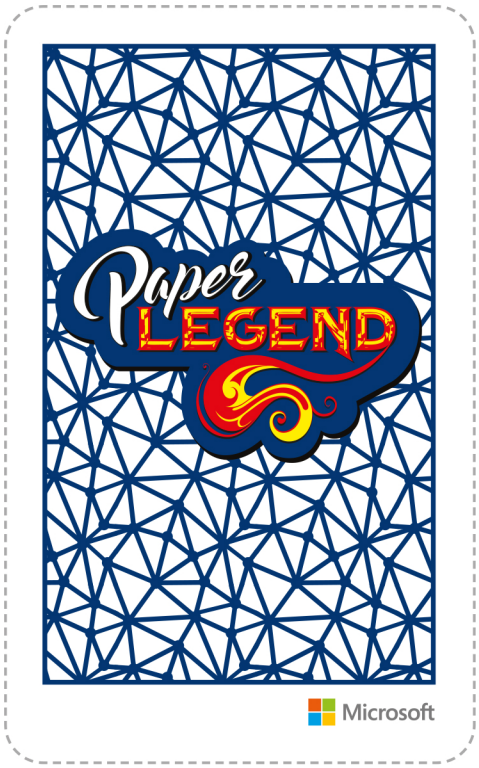
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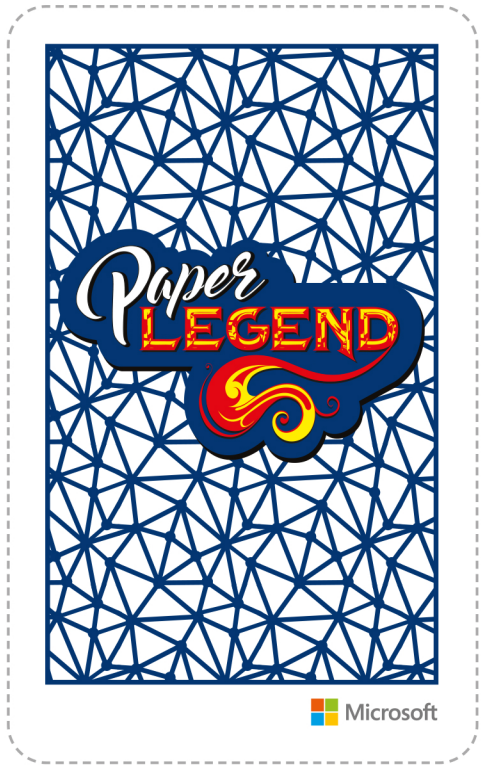
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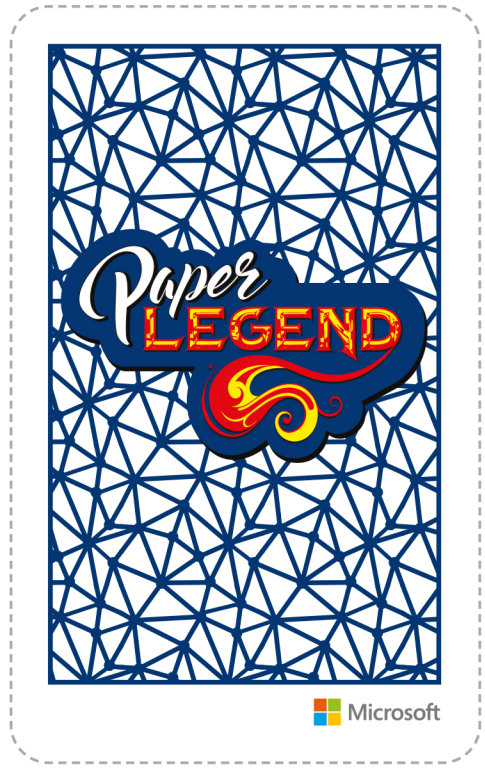
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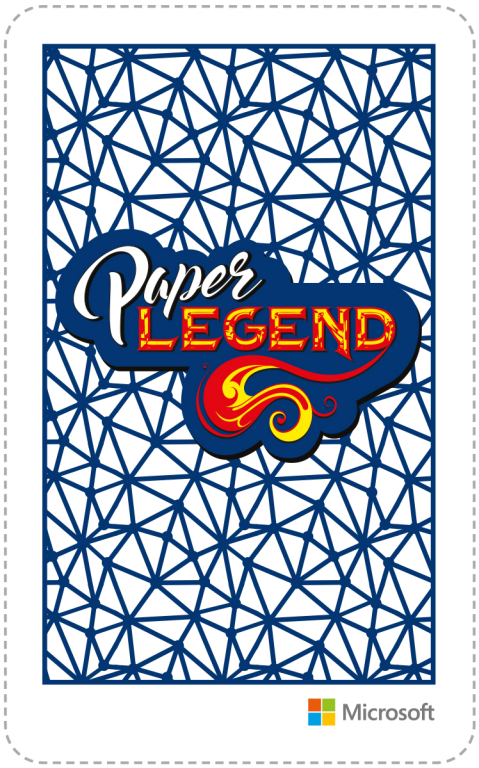
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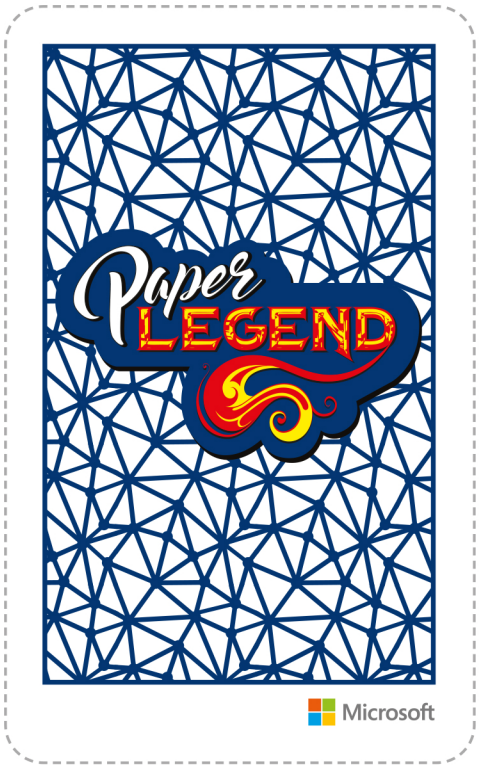
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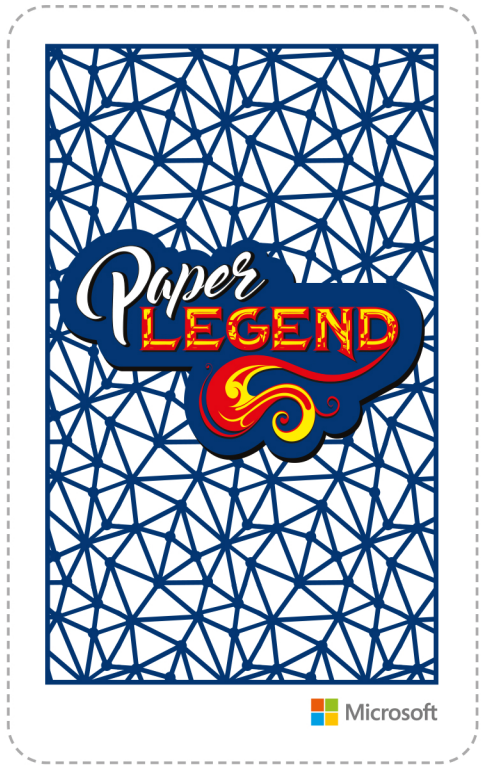
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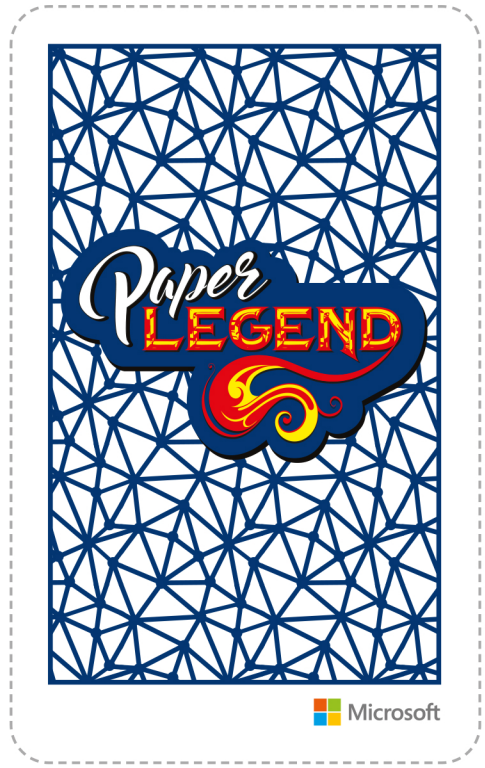
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Beyond bags of features: Spatial pyramid matching for recognizing natural scene categories

Lazebnik, Schmid, Ponce
CVPR 2006

Total citations	6831
Citations per year	621
Equations per page	0.5
Oldest citation*	1991
Self citations	1
Dataset size ($\log_{10}$)	4.0

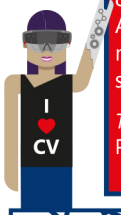
*earliest year wins

Speeded-up robust features (SURF)

Bay, Ess, Tuytelaars, Van Gool
ECCV 2006

Total citations	17557
Citations per year	1596
Equations per page	0.14
Oldest citation*	1984
Self citations	3
Dataset size ($\log_{10}$)	1.7

*earliest year wins



80 million tiny images: A large data set for nonparametric object and scene recognition

Torralba, Fergus, Freeman
PAMI 2008

Total citations	1197
Citations per year	133
Equations per page	0.25
Oldest citation*	1973
Self citations	6
Dataset size ($\log_{10}$)	7.9

*earliest year wins

ImageNet: A large-scale hierarchical image database

Deng, Dong, Socher, Li, Li
CVPR 2009

Total citations	4014
Citations per year	502
Equations per page	0
Oldest citation*	1978
Self citations	4
Dataset size ($\log_{10}$)	6.5

*earliest year wins

The Pascal visual object classes (VOC) challenge

Everingham, Van Gool, Williams, Winn, Zisserman
IJCV 2010

Total citations	3620
Citations per year	517
Equations per page	0.11
Oldest citation*	1986
Self citations	11
Dataset size ($\log_{10}$)	4.2

*earliest year wins

Object detection with discriminatively trained part-based models

Felzenszwalb, Girshick, McAllester, Ramanan
PAMI 2010

Total citations	5489
Citations per year	784
Equations per page	1.55
Oldest citation*	1973
Self citations	6
Dataset size ($\log_{10}$)	4.2

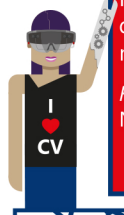
*earliest year wins

Real-time human pose recognition in parts from single depth images

Shotton, Fitzgibbon, Cook, Sharp, Finocchio, Moore, Kipman, Blake
CVPR 2011

Total citations	3590
Citations per year	598
Equations per page	1
Oldest citation*	1983
Self citations	4
Dataset size ($\log_{10}$)	6.0

*earliest year wins

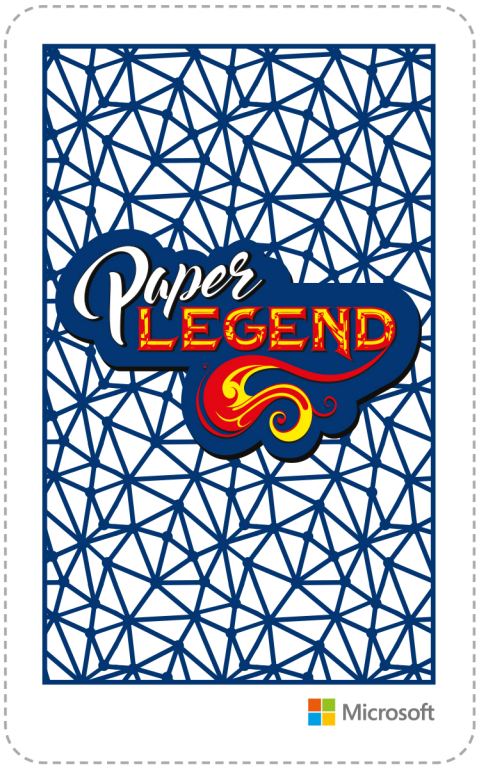


ImageNet classification with deep convolutional neural networks

Krizhevsky, Sutskever, Hinton
NIPS 2012

Total citations	11525
Citations per year	2305
Equations per page	0.33
Oldest citation*	1990
Self citations	5
Dataset size ($\log_{10}$)	6.2

*earliest year wins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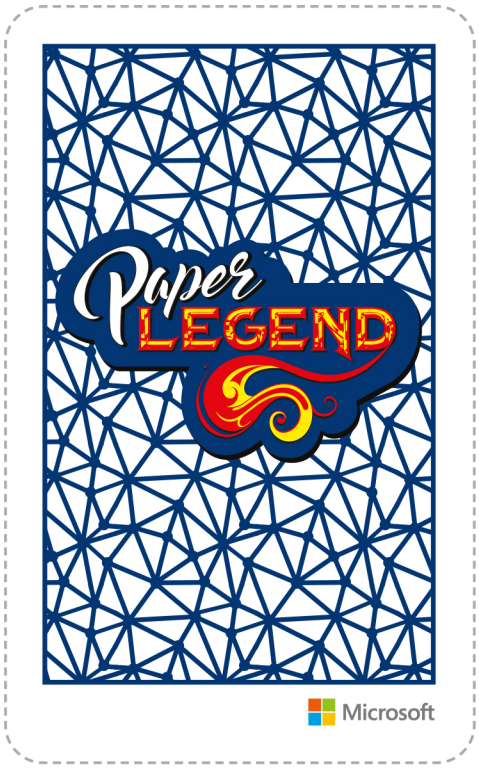
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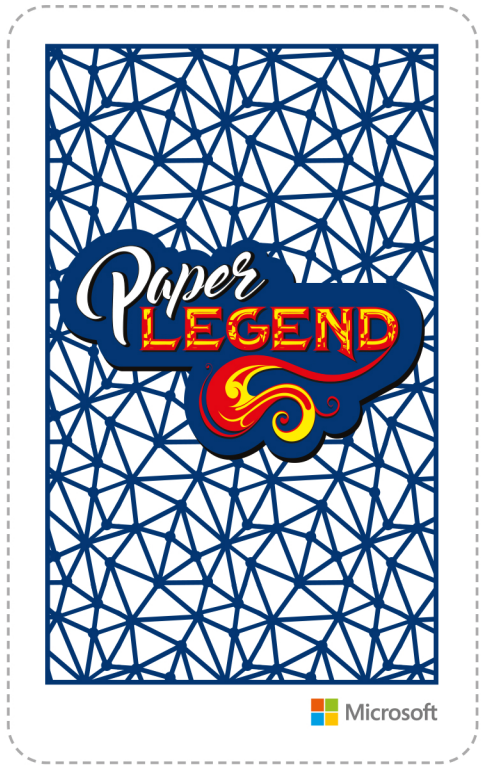
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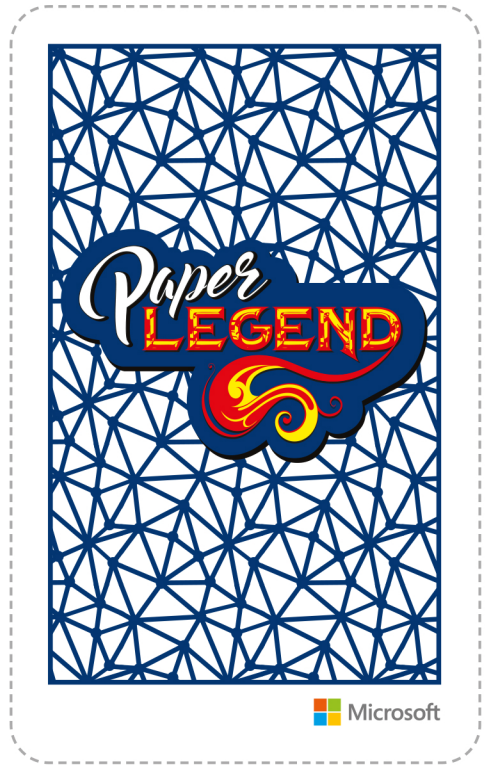
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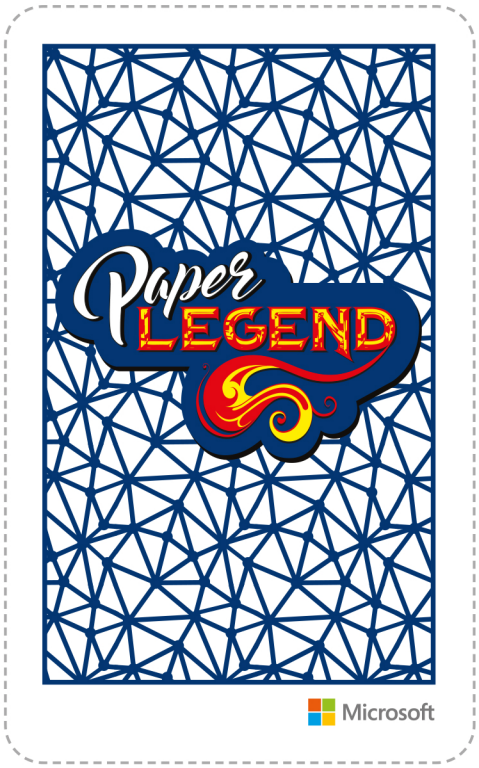
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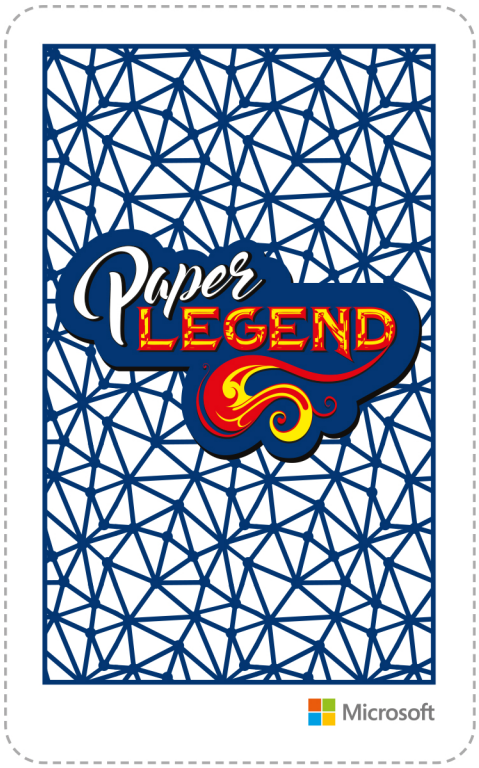
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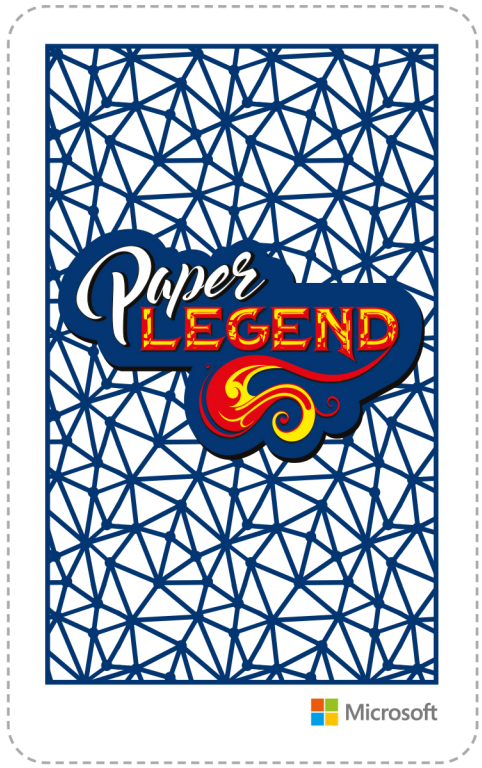
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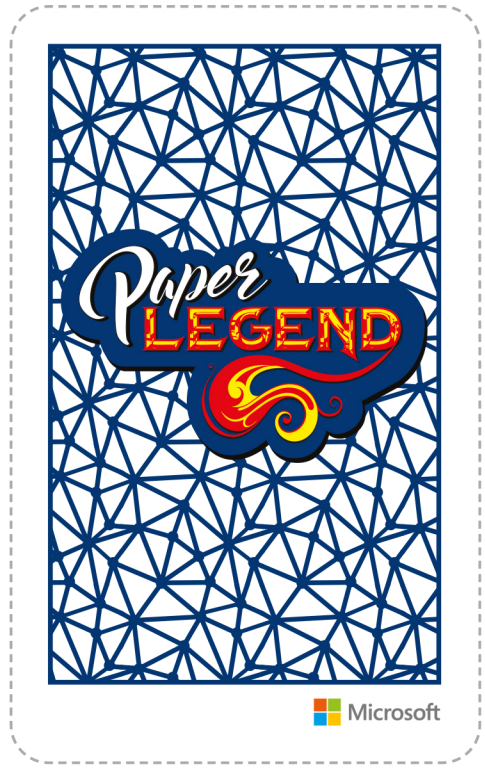
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