Using Deep Convolutional Neural Networks for Object Recognition and Object Tracking

Bachelor-Thesis

submitted by

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born in

Aachen

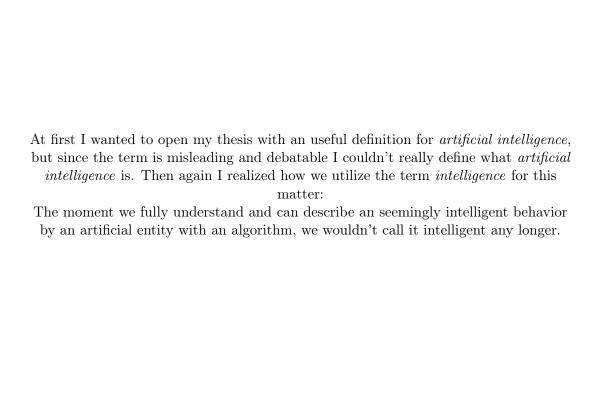
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Abbreviations

AI Artificial intelligence
AWS Amazon Web Services
CIFAR Canadian Institute for Advanced Research
CMOS Sensor active-pixel sensor using CMOS technology
CMOS Complementary Metal-Oxide-Semiconductor
CNN Convolutional Neural Network
CPU Central Processing Unit
DSSD Deconvolutional Single Shot Detector
FLOPS Floating Point Operations Per Second
GPU Graphics Processing Unit
HSV Hue Saturation Value (image color space)
ILSVRC ImageNet Large Scale Visual Recognition Challenge
JcF Jacobian of a Composition
Q Learning Quality Learning
R-CNN Region Based CNN
RAM Random-Access Memory
ReLU Rectified Linear Unit
ResNet Residual Network
RGB Red Green Blue (image color space)
RNN Recurrent Neural Network
ROI Region of Interest
SGD Stochastic Gradient Descent
SIFT Scale-Invariant Feature Transform