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List of Symbols

Symbol	Description
$\mathbf{r}$	Region proposal
h, $\mathcal{H}$	Height
w, $\mathcal{W}$	Width
I	Input Image
ζ, C	Number of channels
$\mathbf{f}$	Forget gate
$\mathfrak{W}$, b	Learnable parameters
$\mathcal{P}$, $\mathbf{CP}$	Conditional probability
x	$x-$ Coordinates
y	$y-$ Coordinates
$\circ$	Hadamard product
$*$	Convolution operation
$\sigma(\cdot)$	Sigmoid function
$\mathbf{m}$	Input modulation gate
$\mathbf{i}$	Input gate
$\mathbf{o}$	Output gate
$\mathbf{h}$	Hidden state
α_t	Weight vector
$\mathbf{v}$	Visual features tensor
$SP(\cdot)$	Spatial pooling
$\mathfrak{h}_{t-1}$, $\mathbf{G}_{t-1}$	Previous hidden state
$t-th$	Timestep
RF	Receptive field
$\delta(\cdot)$	Softmax function
$\mathbf{y}$	Character classes

Abbreviations

Abbreviation	**Description**
CTS	Cluttered TextSpotter
CNN	Convolutional Neural Network
ASPP	Atrous spatial pyramid pooling
ROI	Region of- interest
RRT	Ring radius transform
ReLU	Rectified Linear Unit
EOS	End-of-sequence symbol
CDF	Cumulative density function
ITS	Intelligent Transportation Systems
DAS	Driver-Assistance System
DPP	Dilated pyramid pooling
CAA	Context Aggregation Attention
GRU	Gated recurrent unit
LSTM	Long-short term memory
NMS	Non-maximal suppression
CP	Conditional probability
IoU	Intersection-over-union
maxpool	Maxpool Operation
FTS	Fainted TextSpotter
BTS	Blurred TextSpotter
FCN	Fully Convolutional Network
SSD	Single Shot Detector
FPN	Feature Pyramid Network
SFP	Stacked Feature Pooling
GT	Ground Truth