Result of Start Text Detection Task

Text Information	Predictions
Timestamp	0
Detected text	deeplearningbook.org/contents,
Text Type	LINE
Confidence Level	97.2247
Timestamp	0
Detected text	+
Text Type	LINE
Confidence Level	97.76233
Timestamp	0
Detected text	
Text Type	LINE
Confidence Level	93.5545
Timestamp	0
Detected text	-
Text Type	LINE
Confidence Level	80.446465
Timestamp	0
Detected text	120%
Text Type	LINE
Confidence Level	99.29674

Timestamp	0
Detected text	+
Text Type	LINE
Confidence Level	95.89677
Timestamp	0
Detected text	Greedy layer-wise unsupervise pretraining relies on a single-l represen-
Text Type	LINE
Confidence Level	99.74283
Timestamp	0
Detected text	tation learning algorithm such RBM, a single-layer autoencode sparse
Text Type	LINE
Confidence Level	99.64867
Timestamp	0
Detected text	coding model, or another model learns latent representations. Ea is
Text Type	LINE
Confidence Level	99.83881
Timestamp	0
Detected text	pretrained using unsupervised le taking the output of the previou
Text Type	LINE
Confidence Level	99.89655
Timestamp	0

Detected text	and producing as output a new representation of the data, whe distribution (or
Text Type	LINE
Confidence Level	99.75256
Timestamp	0
Detected text	its relation to other variables, s categories to predict) is hopefull
Text Type	LINE
Confidence Level	99.776085
Timestamp	0
Detected text	See algorithm 15.1 for a form description.
Text Type	LINE
Confidence Level	99.72337
Timestamp	0
Detected text	Greedy layer-wise training proc based on unsupervised criteria h
Text Type	LINE
Confidence Level	99.92023
Timestamp	0
Detected text	been used to sidestep the diffic
Text Type	LINE
Confidence Level	99.88813
Timestamp	0
Detected text	deeplearningbook.org/contents
Text Type	WORD
Confidence Level	97.2247

Timestamp	**0**
Detected text	**+**
Text Type	**WORD**
Confidence Level	**97.76233**
Timestamp	**0**
Detected text	
Text Type	**WORD**
Confidence Level	**93.5545**
Timestamp	**0**
Detected text	**-**
Text Type	**WORD**
Confidence Level	**80.446465**
Timestamp	**0**
Detected text	**120%**
Text Type	**WORD**
Confidence Level	**99.29674**
Timestamp	**0**
Detected text	**+**
Text Type	**WORD**
Confidence Level	**95.89677**
Timestamp	**0**
Detected text	**Greedy**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**layer-wise**
Text Type	**WORD**

Confidence Level	99.77583
Timestamp	0
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.74043
Timestamp	0
Detected text	pretraining
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	relies
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	on
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	a
Text Type	WORD
Confidence Level	98.55616
Timestamp	0
Detected text	single-layer
Text Type	WORD
Confidence Level	100
Timestamp	0

Detected text	**represen-**
Text Type	**WORD**
Confidence Level	**99.613045**
Timestamp	**0**
Detected text	**tation**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**learning**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**algorithm**
Text Type	**WORD**
Confidence Level	**99.93444**
Timestamp	**0**
Detected text	**such**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**as**
Text Type	**WORD**
Confidence Level	**99.91669**
Timestamp	**0**
Detected text	**an**
Text Type	**WORD**
Confidence Level	**99.54238**

Timestamp	**0**
Detected text	**RBM,**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**a**
Text Type	**WORD**
Confidence Level	**98.547615**
Timestamp	**0**
Detected text	**single-layer**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**autoencoder,**
Text Type	**WORD**
Confidence Level	**99.17156**
Timestamp	**0**
Detected text	**a**
Text Type	**WORD**
Confidence Level	**98.77409**
Timestamp	**0**
Detected text	**sparse**
Text Type	**WORD**
Confidence Level	**99.89727**
Timestamp	**0**
Detected text	**coding**
Text Type	**WORD**

Confidence Level	**100**
Timestamp	**0**
Detected text	**model,**
Text Type	**WORD**
Confidence Level	**99.96053**
Timestamp	**0**
Detected text	**or**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**another**
Text Type	**WORD**
Confidence Level	**99.93024**
Timestamp	**0**
Detected text	**model**
Text Type	**WORD**
Confidence Level	**99.76239**
Timestamp	**0**
Detected text	**that**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**
Detected text	**learns**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**0**

Detected text	latent
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	representations.
Text Type	WORD
Confidence Level	98.74513
Timestamp	0
Detected text	Each
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	layer
Text Type	WORD
Confidence Level	99.98901
Timestamp	0
Detected text	is
Text Type	WORD
Confidence Level	99.67844
Timestamp	0
Detected text	pretrained
Text Type	WORD
Confidence Level	99.78841
Timestamp	0
Detected text	using
Text Type	WORD
Confidence Level	99.85929

Timestamp	0
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.77489
Timestamp	0
Detected text	learning,
Text Type	WORD
Confidence Level	99.43957
Timestamp	0
Detected text	taking
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	output
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	the
Text Type	WORD

Confidence Level	100
Timestamp	0
Detected text	previous
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	and
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	producing
Text Type	WORD
Confidence Level	99.9766
Timestamp	0
Detected text	as
Text Type	WORD
Confidence Level	99.6621
Timestamp	0
Detected text	output
Text Type	WORD
Confidence Level	100
Timestamp	0

Detected text	a
Text Type	WORD
Confidence Level	99.02293
Timestamp	0
Detected text	new
Text Type	WORD
Confidence Level	99.7878
Timestamp	0
Detected text	representation
Text Type	WORD
Confidence Level	99.23847
Timestamp	0
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	data,
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	whose
Text Type	WORD
Confidence Level	99.90563

Timestamp	0
Detected text	distribution
Text Type	WORD
Confidence Level	99.362015
Timestamp	0
Detected text	(or
Text Type	WORD
Confidence Level	99.8278
Timestamp	0
Detected text	its
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	relation
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	to
Text Type	WORD
Confidence Level	99.63661
Timestamp	0
Detected text	other
Text Type	WORD
Confidence Level	99.98559
Timestamp	0
Detected text	variables,
Text Type	WORD

Confidence Level	99.195885
Timestamp	0
Detected text	such
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	as
Text Type	WORD
Confidence Level	99.65947
Timestamp	0
Detected text	categories
Text Type	WORD
Confidence Level	99.75095
Timestamp	0
Detected text	to
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	predict)
Text Type	WORD
Confidence Level	99.3175
Timestamp	0
Detected text	is
Text Type	WORD
Confidence Level	99.75269
Timestamp	0

Detected text	hopefully
Text Type	WORD
Confidence Level	99.88345
Timestamp	0
Detected text	simpler.
Text Type	WORD
Confidence Level	99.90696
Timestamp	0
Detected text	See
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	algorithm
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	15.1
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	for
Text Type	WORD
Confidence Level	99.87552
Timestamp	0
Detected text	a
Text Type	WORD
Confidence Level	98.4793

Timestamp	0
Detected text	formal
Text Type	WORD
Confidence Level	99.98013
Timestamp	0
Detected text	description.
Text Type	WORD
Confidence Level	99.728615
Timestamp	0
Detected text	Greedy
Text Type	WORD
Confidence Level	99.86033
Timestamp	0
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.88659
Timestamp	0
Detected text	training
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	procedures
Text Type	WORD
Confidence Level	99.86187
Timestamp	0
Detected text	based
Text Type	WORD

Confidence Level	100
Timestamp	0
Detected text	on
Text Type	WORD
Confidence Level	99.59351
Timestamp	0
Detected text	unsupervised
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	criteria
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	have
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	long
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	been
Text Type	WORD
Confidence Level	99.72954
Timestamp	0

Detected text	used
Text Type	WORD
Confidence Level	99.71264
Timestamp	0
Detected text	to
Text Type	WORD
Confidence Level	99.9171
Timestamp	0
Detected text	sidestep
Text Type	WORD
Confidence Level	99.85764
Timestamp	0
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	difficulty
Text Type	WORD
Confidence Level	100
Timestamp	0
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	deeplearningbook.org/contents
Text Type	LINE
Confidence Level	97.09294

Timestamp	1000
Detected text	+
Text Type	LINE
Confidence Level	97.73924
Timestamp	1000
Detected text	
Text Type	LINE
Confidence Level	81.14071
Timestamp	1000
Detected text	-
Text Type	LINE
Confidence Level	90.16131
Timestamp	1000
Detected text	120%
Text Type	LINE
Confidence Level	99.259674
Timestamp	1000
Detected text	+
Text Type	LINE
Confidence Level	95.83717
Timestamp	1000
Detected text	Greedy layer-wise unsupervise pretraining relies on a single-l represen-
Text Type	LINE
Confidence Level	99.738945
Timestamp	1000

Detected text	tation learning algorithm such RBM, a single-layer autoencode sparse
Text Type	LINE
Confidence Level	99.653694
Timestamp	1000
Detected text	coding model, or another model learns latent representations. Ea is
Text Type	LINE
Confidence Level	99.82069
Timestamp	1000
Detected text	pretrained using unsupervised le taking the output of the previou
Text Type	LINE
Confidence Level	99.89786
Timestamp	1000
Detected text	and producing as output a new representation of the data, who distribution (or
Text Type	LINE
Confidence Level	99.7581
Timestamp	1000
Detected text	its relation to other variables, s categories to predict) is hopefull
Text Type	LINE
Confidence Level	99.83772
Timestamp	1000

Detected text	See algorithm 15.1 for a forma...
	description.
Text Type	LINE
Confidence Level	99.7344
Timestamp	1000
Detected text	Greedy layer-wise training proce...
	based on unsupervised criteria h...
Text Type	LINE
Confidence Level	99.92808
Timestamp	1000
Detected text	been used to sidestep the diffic...
Text Type	LINE
Confidence Level	99.90593
Timestamp	1000
Detected text	deeplearningbook.org/contents...
Text Type	WORD
Confidence Level	97.09294
Timestamp	1000
Detected text	+
Text Type	WORD
Confidence Level	97.73924
Timestamp	1000
Detected text	
Text Type	WORD
Confidence Level	81.14071
Timestamp	1000
Detected text	-

Text Type	WORD
Confidence Level	90.16131
Timestamp	1000
Detected text	120%
Text Type	WORD
Confidence Level	99.259674
Timestamp	1000
Detected text	+
Text Type	WORD
Confidence Level	95.83717
Timestamp	1000
Detected text	Greedy
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.71349
Timestamp	1000
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.7533
Timestamp	1000
Detected text	pretraining
Text Type	WORD
Confidence Level	100

Timestamp	1000
Detected text	relies
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	on
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	a
Text Type	WORD
Confidence Level	98.56554
Timestamp	1000
Detected text	single-layer
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	represen-
Text Type	WORD
Confidence Level	99.61813
Timestamp	1000
Detected text	tation
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	learning
Text Type	WORD

Confidence Level	100
Timestamp	1000
Detected text	algorithm
Text Type	WORD
Confidence Level	99.93133
Timestamp	1000
Detected text	such
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	as
Text Type	WORD
Confidence Level	99.90309
Timestamp	1000
Detected text	an
Text Type	WORD
Confidence Level	99.54051
Timestamp	1000
Detected text	RBM,
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	a
Text Type	WORD
Confidence Level	98.60408
Timestamp	1000

Detected text	single-layer
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	autoencoder,
Text Type	WORD
Confidence Level	99.21329
Timestamp	1000
Detected text	a
Text Type	WORD
Confidence Level	98.77936
Timestamp	1000
Detected text	sparse
Text Type	WORD
Confidence Level	99.87271
Timestamp	1000
Detected text	coding
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	model,
Text Type	WORD
Confidence Level	99.93702
Timestamp	1000
Detected text	or
Text Type	WORD
Confidence Level	100

Timestamp	1000
Detected text	another
Text Type	WORD
Confidence Level	99.85704
Timestamp	1000
Detected text	model
Text Type	WORD
Confidence Level	99.75364
Timestamp	1000
Detected text	that
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	learns
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	latent
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	representations.
Text Type	WORD
Confidence Level	98.68634
Timestamp	1000
Detected text	Each
Text Type	WORD

Confidence Level	100
Timestamp	1000
Detected text	layer
Text Type	WORD
Confidence Level	99.95636
Timestamp	1000
Detected text	is
Text Type	WORD
Confidence Level	99.657875
Timestamp	1000
Detected text	pretrained
Text Type	WORD
Confidence Level	99.79398
Timestamp	1000
Detected text	using
Text Type	WORD
Confidence Level	99.85375
Timestamp	1000
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.77288
Timestamp	1000
Detected text	learning,
Text Type	WORD
Confidence Level	99.45584
Timestamp	1000

Detected text	taking
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	output
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	previous
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	layer
Text Type	WORD
Confidence Level	100

Timestamp	1000
Detected text	and
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	producing
Text Type	WORD
Confidence Level	99.976845
Timestamp	1000
Detected text	as
Text Type	WORD
Confidence Level	99.66146
Timestamp	1000
Detected text	output
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	a
Text Type	WORD
Confidence Level	99.1427
Timestamp	1000
Detected text	new
Text Type	WORD
Confidence Level	99.787704
Timestamp	1000
Detected text	representation
Text Type	WORD

Confidence Level	99.22782
Timestamp	1000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	data,
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	whose
Text Type	WORD
Confidence Level	99.89008
Timestamp	1000
Detected text	distribution
Text Type	WORD
Confidence Level	99.36269
Timestamp	1000
Detected text	(or
Text Type	WORD
Confidence Level	99.80604
Timestamp	1000

Detected text	its
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	relation
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	to
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	other
Text Type	WORD
Confidence Level	99.99927
Timestamp	1000
Detected text	variables,
Text Type	WORD
Confidence Level	99.234024
Timestamp	1000
Detected text	such
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	as
Text Type	WORD
Confidence Level	99.65636

Timestamp	1000
Detected text	categories
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	to
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	predict)
Text Type	WORD
Confidence Level	99.3716
Timestamp	1000
Detected text	is
Text Type	WORD
Confidence Level	99.73705
Timestamp	1000
Detected text	hopefully
Text Type	WORD
Confidence Level	99.89207
Timestamp	1000
Detected text	simpler.
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	See
Text Type	WORD

Confidence Level	100
Timestamp	1000
Detected text	algorithm
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	15.1
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	for
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	a
Text Type	WORD
Confidence Level	98.447
Timestamp	1000
Detected text	formal
Text Type	WORD
Confidence Level	99.98788
Timestamp	1000
Detected text	description.
Text Type	WORD
Confidence Level	99.70588
Timestamp	1000

Detected text	**Greedy**
Text Type	**WORD**
Confidence Level	**99.86409**
Timestamp	**1000**
Detected text	**layer-wise**
Text Type	**WORD**
Confidence Level	**99.88195**
Timestamp	**1000**
Detected text	**training**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**1000**
Detected text	**procedures**
Text Type	**WORD**
Confidence Level	**99.88593**
Timestamp	**1000**
Detected text	**based**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**1000**
Detected text	**on**
Text Type	**WORD**
Confidence Level	**99.64882**
Timestamp	**1000**
Detected text	**unsupervised**
Text Type	**WORD**
Confidence Level	**100**

Timestamp	1000
Detected text	criteria
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	have
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	long
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	been
Text Type	WORD
Confidence Level	99.73356
Timestamp	1000
Detected text	used
Text Type	WORD
Confidence Level	99.76707
Timestamp	1000
Detected text	to
Text Type	WORD
Confidence Level	99.97805
Timestamp	1000
Detected text	sidestep
Text Type	WORD

Confidence Level	99.8628
Timestamp	1000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	difficulty
Text Type	WORD
Confidence Level	100
Timestamp	1000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	deeplearningbook.org/contents,
Text Type	LINE
Confidence Level	96.178215
Timestamp	2000
Detected text	+
Text Type	LINE
Confidence Level	97.740395
Timestamp	2000
Detected text	
Text Type	LINE
Confidence Level	81.40499
Timestamp	2000

Detected text	-
Text Type	LINE
Confidence Level	90.25052
Timestamp	2000
Detected text	120%
Text Type	LINE
Confidence Level	99.26023
Timestamp	2000
Detected text	+
Text Type	LINE
Confidence Level	95.84708
Timestamp	2000
Detected text	Greedy layer-wise unsupervise pretraining relies on a single-l represen-
Text Type	LINE
Confidence Level	99.74271
Timestamp	2000
Detected text	tation learning algorithm such RBM, a single-layer autoencode sparse
Text Type	LINE
Confidence Level	99.65661
Timestamp	2000
Detected text	coding model, or another model learns latent representations. Ea is
Text Type	LINE

Confidence Level	99.82075
Timestamp	2000
Detected text	pretrained using unsupervised le... taking the output of the previou...
Text Type	LINE
Confidence Level	99.89559
Timestamp	2000
Detected text	and producing as output a new... representation of the data, whe... distribution (or
Text Type	LINE
Confidence Level	99.75737
Timestamp	2000
Detected text	its relation to other variables, s... categories to predict) is hopefull...
Text Type	LINE
Confidence Level	99.8345
Timestamp	2000
Detected text	See algorithm 15.1 for a forma... description.
Text Type	LINE
Confidence Level	99.73454
Timestamp	2000
Detected text	Greedy layer-wise training proce... based on unsupervised criteria h...
Text Type	LINE
Confidence Level	99.92855

Timestamp	2000
Detected text	been used to sidestep the diffic
Text Type	LINE
Confidence Level	99.90635
Timestamp	2000
Detected text	deeplearningbook.org/contents,
Text Type	WORD
Confidence Level	96.178215
Timestamp	2000
Detected text	+
Text Type	WORD
Confidence Level	97.740395
Timestamp	2000
Detected text	
Text Type	WORD
Confidence Level	81.40499
Timestamp	2000
Detected text	-
Text Type	WORD
Confidence Level	90.25052
Timestamp	2000
Detected text	120%
Text Type	WORD
Confidence Level	99.26023
Timestamp	2000
Detected text	+
Text Type	WORD

Confidence Level	95.84708
Timestamp	2000
Detected text	Greedy
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.77074
Timestamp	2000
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.75424
Timestamp	2000
Detected text	pretraining
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	relies
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	on
Text Type	WORD
Confidence Level	100
Timestamp	2000

Detected text	a
Text Type	WORD
Confidence Level	98.53861
Timestamp	2000
Detected text	single-layer
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	represen-
Text Type	WORD
Confidence Level	99.62079
Timestamp	2000
Detected text	tation
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	learning
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	algorithm
Text Type	WORD
Confidence Level	99.93105
Timestamp	2000
Detected text	such
Text Type	WORD
Confidence Level	100

Timestamp	2000
Detected text	as
Text Type	WORD
Confidence Level	99.89815
Timestamp	2000
Detected text	an
Text Type	WORD
Confidence Level	99.54079
Timestamp	2000
Detected text	RBM,
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	a
Text Type	WORD
Confidence Level	98.62533
Timestamp	2000
Detected text	single-layer
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	autoencoder,
Text Type	WORD
Confidence Level	99.218155
Timestamp	2000
Detected text	a
Text Type	WORD

Confidence Level	98.7926
Timestamp	2000
Detected text	sparse
Text Type	WORD
Confidence Level	99.8732
Timestamp	2000
Detected text	coding
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	model,
Text Type	WORD
Confidence Level	99.938194
Timestamp	2000
Detected text	or
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	another
Text Type	WORD
Confidence Level	99.86098
Timestamp	2000
Detected text	model
Text Type	WORD
Confidence Level	99.75334
Timestamp	2000

Detected text	that
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	learns
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	latent
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	representations.
Text Type	WORD
Confidence Level	98.6823
Timestamp	2000
Detected text	Each
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	layer
Text Type	WORD
Confidence Level	99.95534
Timestamp	2000
Detected text	is
Text Type	WORD
Confidence Level	99.65882

Timestamp	2000
Detected text	pretrained
Text Type	WORD
Confidence Level	99.793304
Timestamp	2000
Detected text	using
Text Type	WORD
Confidence Level	99.85329
Timestamp	2000
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.773636
Timestamp	2000
Detected text	learning,
Text Type	WORD
Confidence Level	99.43127
Timestamp	2000
Detected text	taking
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	output
Text Type	WORD

Confidence Level	100
Timestamp	2000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	previous
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	and
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	producing
Text Type	WORD
Confidence Level	99.97639
Timestamp	2000

Detected text	as
Text Type	WORD
Confidence Level	99.66277
Timestamp	2000
Detected text	output
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	a
Text Type	WORD
Confidence Level	99.13071
Timestamp	2000
Detected text	new
Text Type	WORD
Confidence Level	99.78791
Timestamp	2000
Detected text	representation
Text Type	WORD
Confidence Level	99.228615
Timestamp	2000
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Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	the
Text Type	WORD
Confidence Level	100

Timestamp	2000
Detected text	data,
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	whose
Text Type	WORD
Confidence Level	99.88946
Timestamp	2000
Detected text	distribution
Text Type	WORD
Confidence Level	99.36286
Timestamp	2000
Detected text	(or
Text Type	WORD
Confidence Level	99.80706
Timestamp	2000
Detected text	its
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	relation
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	to
Text Type	WORD

Confidence Level	100
Timestamp	2000
Detected text	other
Text Type	WORD
Confidence Level	99.998505
Timestamp	2000
Detected text	variables,
Text Type	WORD
Confidence Level	99.29845
Timestamp	2000
Detected text	such
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	as
Text Type	WORD
Confidence Level	99.65672
Timestamp	2000
Detected text	categories
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	to
Text Type	WORD
Confidence Level	100
Timestamp	2000

Detected text	predict)
Text Type	WORD
Confidence Level	99.36075
Timestamp	2000
Detected text	is
Text Type	WORD
Confidence Level	99.73694
Timestamp	2000
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Text Type	WORD
Confidence Level	99.89079
Timestamp	2000
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Text Type	WORD
Confidence Level	99.906395
Timestamp	2000
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Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	algorithm
Text Type	WORD
Confidence Level	100
Timestamp	2000
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Text Type	WORD
Confidence Level	100

Timestamp	2000
Detected text	for
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	a
Text Type	WORD
Confidence Level	98.45198
Timestamp	2000
Detected text	formal
Text Type	WORD
Confidence Level	99.98777
Timestamp	2000
Detected text	description.
Text Type	WORD
Confidence Level	99.70207
Timestamp	2000
Detected text	Greedy
Text Type	WORD
Confidence Level	99.864685
Timestamp	2000
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Text Type	WORD
Confidence Level	99.884415
Timestamp	2000
Detected text	training
Text Type	WORD

Confidence Level	100
Timestamp	2000
Detected text	procedures
Text Type	WORD
Confidence Level	99.88674
Timestamp	2000
Detected text	based
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	on
Text Type	WORD
Confidence Level	99.6497
Timestamp	2000
Detected text	unsupervised
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	criteria
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	have
Text Type	WORD
Confidence Level	100
Timestamp	2000

Detected text	long
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	been
Text Type	WORD
Confidence Level	99.73434
Timestamp	2000
Detected text	used
Text Type	WORD
Confidence Level	99.76787
Timestamp	2000
Detected text	to
Text Type	WORD
Confidence Level	99.97825
Timestamp	2000
Detected text	sidestep
Text Type	WORD
Confidence Level	99.86397
Timestamp	2000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	2000
Detected text	difficulty
Text Type	WORD
Confidence Level	100

Timestamp	2000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	deeplearningbook.org/contents,
Text Type	LINE
Confidence Level	97.10973
Timestamp	3000
Detected text	+
Text Type	LINE
Confidence Level	97.64838
Timestamp	3000
Detected text	
Text Type	LINE
Confidence Level	81.04243
Timestamp	3000
Detected text	120%
Text Type	LINE
Confidence Level	99.27889
Timestamp	3000
Detected text	+
Text Type	LINE
Confidence Level	96.02551
Timestamp	3000
Detected text	Greedy layer-wise unsupervised pretraining relies on a single-l

	represen-
Text Type	LINE
Confidence Level	99.74133
Timestamp	3000
Detected text	tation learning algorithm such RBM, a single-layer autoencode sparse
Text Type	LINE
Confidence Level	99.71064
Timestamp	3000
Detected text	coding model, or another model learns latent representations. Ea is
Text Type	LINE
Confidence Level	99.83655
Timestamp	3000
Detected text	pretrained using unsupervised le taking the output of the previou
Text Type	LINE
Confidence Level	99.84663
Timestamp	3000
Detected text	and producing as output a nev representation of the data, who distribution (or
Text Type	LINE
Confidence Level	99.74192
Timestamp	3000
Detected text	its relation to other variables, s

	categories to predict) is hopefull
Text Type	LINE
Confidence Level	99.84325
Timestamp	3000
Detected text	See algorithm 15.1 for a forma description.
Text Type	LINE
Confidence Level	99.7557
Timestamp	3000
Detected text	Greedy layer-wise training proce based on unsupervised criteria h
Text Type	LINE
Confidence Level	99.961235
Timestamp	3000
Detected text	been used to sidestep the diffic jointly
Text Type	LINE
Confidence Level	99.968376
Timestamp	3000
Detected text	deeplearningbook.org/contents,
Text Type	WORD
Confidence Level	97.10973
Timestamp	3000
Detected text	+
Text Type	WORD
Confidence Level	97.64838
Timestamp	3000

Detected text	
Text Type	WORD
Confidence Level	81.04243
Timestamp	3000
Detected text	120%
Text Type	WORD
Confidence Level	99.27889
Timestamp	3000
Detected text	+
Text Type	WORD
Confidence Level	96.02551
Timestamp	3000
Detected text	Greedy
Text Type	WORD
Confidence Level	99.88086
Timestamp	3000
Detected text	layer-wise
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.96978
Timestamp	3000
Detected text	pretraining
Text Type	WORD
Confidence Level	99.76237

Timestamp	3000
Detected text	relies
Text Type	WORD
Confidence Level	99.95048
Timestamp	3000
Detected text	on
Text Type	WORD
Confidence Level	99.70371
Timestamp	3000
Detected text	a
Text Type	WORD
Confidence Level	98.55963
Timestamp	3000
Detected text	single-layer
Text Type	WORD
Confidence Level	99.85729
Timestamp	3000
Detected text	represen-
Text Type	WORD
Confidence Level	99.98791
Timestamp	3000
Detected text	tation
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	learning
Text Type	WORD

Confidence Level	99.144196
Timestamp	3000
Detected text	algorithm
Text Type	WORD
Confidence Level	100
Timestamp	3000
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Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	as
Text Type	WORD
Confidence Level	99.58083
Timestamp	3000
Detected text	an
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	RBM,
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	a
Text Type	WORD
Confidence Level	98.99802
Timestamp	3000

Detected text	single-layer
Text Type	WORD
Confidence Level	99.80166
Timestamp	3000
Detected text	autoencoder,
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	a
Text Type	WORD
Confidence Level	99.00303
Timestamp	3000
Detected text	sparse
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	coding
Text Type	WORD
Confidence Level	99.90451
Timestamp	3000
Detected text	model,
Text Type	WORD
Confidence Level	99.928535
Timestamp	3000
Detected text	or
Text Type	WORD
Confidence Level	99.48241

Timestamp	3000
Detected text	another
Text Type	WORD
Confidence Level	99.356636
Timestamp	3000
Detected text	model
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	that
Text Type	WORD
Confidence Level	99.86791
Timestamp	3000
Detected text	learns
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	latent
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	representations.
Text Type	WORD
Confidence Level	99.63011
Timestamp	3000
Detected text	Each
Text Type	WORD

Confidence Level	100
Timestamp	3000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	is
Text Type	WORD
Confidence Level	99.86847
Timestamp	3000
Detected text	pretrained
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	using
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	unsupervised
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	learning,
Text Type	WORD
Confidence Level	98.80774
Timestamp	3000

Detected text	taking
Text Type	WORD
Confidence Level	99.9557
Timestamp	3000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	output
Text Type	WORD
Confidence Level	99.70145
Timestamp	3000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	previous
Text Type	WORD
Confidence Level	99.848045
Timestamp	3000
Detected text	layer
Text Type	WORD
Confidence Level	100

Timestamp	3000
Detected text	and
Text Type	WORD
Confidence Level	99.91928
Timestamp	3000
Detected text	producing
Text Type	WORD
Confidence Level	99.46602
Timestamp	3000
Detected text	as
Text Type	WORD
Confidence Level	99.6346
Timestamp	3000
Detected text	output
Text Type	WORD
Confidence Level	99.66029
Timestamp	3000
Detected text	a
Text Type	WORD
Confidence Level	98.6504
Timestamp	3000
Detected text	new
Text Type	WORD
Confidence Level	99.92216
Timestamp	3000
Detected text	representation
Text Type	WORD

Confidence Level	99.42201
Timestamp	3000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	data,
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	whose
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	distribution
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	(or
Text Type	WORD
Confidence Level	99.970215
Timestamp	3000

Detected text	its
Text Type	WORD
Confidence Level	99.97607
Timestamp	3000
Detected text	relation
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	to
Text Type	WORD
Confidence Level	99.72056
Timestamp	3000
Detected text	other
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	variables,
Text Type	WORD
Confidence Level	99.520065
Timestamp	3000
Detected text	such
Text Type	WORD
Confidence Level	99.927
Timestamp	3000
Detected text	as
Text Type	WORD
Confidence Level	99.86489

Timestamp	**3000**
Detected text	**categories**
Text Type	**WORD**
Confidence Level	**99.78299**
Timestamp	**3000**
Detected text	**to**
Text Type	**WORD**
Confidence Level	**99.94663**
Timestamp	**3000**
Detected text	**predict)**
Text Type	**WORD**
Confidence Level	**99.40385**
Timestamp	**3000**
Detected text	**is**
Text Type	**WORD**
Confidence Level	**99.82022**
Timestamp	**3000**
Detected text	**hopefully**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**3000**
Detected text	**simpler.**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**3000**
Detected text	**See**
Text Type	**WORD**

Confidence Level	100
Timestamp	3000
Detected text	algorithm
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	15.1
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	for
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	a
Text Type	WORD
Confidence Level	98.2899
Timestamp	3000
Detected text	formal
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	description.
Text Type	WORD
Confidence Level	99.99999
Timestamp	3000

Detected text	Greedy
Text Type	WORD
Confidence Level	99.92728
Timestamp	3000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.94882
Timestamp	3000
Detected text	training
Text Type	WORD
Confidence Level	99.97228
Timestamp	3000
Detected text	procedures
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	based
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	on
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	unsupervised
Text Type	WORD
Confidence Level	100

Timestamp	3000
Detected text	criteria
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	have
Text Type	WORD
Confidence Level	99.76399
Timestamp	3000
Detected text	long
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	been
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	used
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	to
Text Type	WORD
Confidence Level	99.99832
Timestamp	3000
Detected text	sidestep
Text Type	WORD

Confidence Level	99.74868
Timestamp	3000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	difficulty
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	3000
Detected text	jointly
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	deeplearningbook.org/contents,
Text Type	LINE
Confidence Level	96.07841
Timestamp	4000
Detected text	+
Text Type	LINE
Confidence Level	97.66429
Timestamp	4000

Detected text	-
Text Type	LINE
Confidence Level	89.41788
Timestamp	4000
Detected text	120%
Text Type	LINE
Confidence Level	99.325424
Timestamp	4000
Detected text	+
Text Type	LINE
Confidence Level	96.27867
Timestamp	4000
Detected text	that greedy layer-wise pretrainin required to train fully connecte
Text Type	LINE
Confidence Level	99.86588
Timestamp	4000
Detected text	architectures, but the unsuperv pretraining approach was the f method to
Text Type	LINE
Confidence Level	99.88855
Timestamp	4000
Detected text	succeed.
Text Type	LINE
Confidence Level	99.49745
Timestamp	4000

Detected text	Greedy layer-wise pretraining is greedy because it is a greedy a
Text Type	LINE
Confidence Level	99.86162
Timestamp	4000
Detected text	526
Text Type	LINE
Confidence Level	100
Timestamp	4000
Detected text	CHAPTER 15. REPRESENTATION LEARNING
Text Type	LINE
Confidence Level	99.80019
Timestamp	4000
Detected text	rithm, meaning that it optimizes piece of the solution independen
Text Type	LINE
Confidence Level	99.93586
Timestamp	4000
Detected text	piece at a time, rather than joi optimizing all pieces. It is cal layer-wise
Text Type	LINE
Confidence Level	99.87152
Timestamp	4000
Detected text	because these independent piec the layers of the network. Speci greedy

Text Type	LINE
Confidence Level	99.91151
Timestamp	4000
Detected text	deeplearningbook.org/contents,
Text Type	WORD
Confidence Level	96.07841
Timestamp	4000
Detected text	+
Text Type	WORD
Confidence Level	97.66429
Timestamp	4000
Detected text	-
Text Type	WORD
Confidence Level	89.41788
Timestamp	4000
Detected text	120%
Text Type	WORD
Confidence Level	99.325424
Timestamp	4000
Detected text	+
Text Type	WORD
Confidence Level	96.27867
Timestamp	4000
Detected text	that
Text Type	WORD
Confidence Level	100

Timestamp	4000
Detected text	greedy
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.629196
Timestamp	4000
Detected text	pretraining
Text Type	WORD
Confidence Level	99.66255
Timestamp	4000
Detected text	is
Text Type	WORD
Confidence Level	99.71026
Timestamp	4000
Detected text	not
Text Type	WORD
Confidence Level	99.98605
Timestamp	4000
Detected text	required
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	to
Text Type	WORD

Confidence Level	100
Timestamp	4000
Detected text	train
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	fully
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	connected
Text Type	WORD
Confidence Level	99.40256
Timestamp	4000
Detected text	deep
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	architectures,
Text Type	WORD
Confidence Level	99.31169
Timestamp	4000
Detected text	but
Text Type	WORD
Confidence Level	100
Timestamp	4000

Detected text	the
Text Type	WORD
Confidence Level	99.95187
Timestamp	4000
Detected text	unsupervised
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	pretraining
Text Type	WORD
Confidence Level	99.93213
Timestamp	4000
Detected text	approach
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	was
Text Type	WORD
Confidence Level	99.9202
Timestamp	4000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	first
Text Type	WORD
Confidence Level	100

Timestamp	4000
Detected text	method
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	to
Text Type	WORD
Confidence Level	99.65817
Timestamp	4000
Detected text	succeed.
Text Type	WORD
Confidence Level	99.49745
Timestamp	4000
Detected text	Greedy
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.87624
Timestamp	4000
Detected text	pretraining
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	is
Text Type	WORD

Confidence Level	99.96816
Timestamp	4000
Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	greedy
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	because
Text Type	WORD
Confidence Level	99.8927
Timestamp	4000
Detected text	it
Text Type	WORD
Confidence Level	99.85634
Timestamp	4000
Detected text	is
Text Type	WORD
Confidence Level	99.72957
Timestamp	4000
Detected text	a
Text Type	WORD
Confidence Level	99.17552
Timestamp	4000

Detected text	**greedy**
Text Type	**WORD**
Confidence Level	**99.92241**
Timestamp	**4000**
Detected text	**algo-**
Text Type	**WORD**
Confidence Level	**99.918526**
Timestamp	**4000**
Detected text	**526**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**4000**
Detected text	**CHAPTER**
Text Type	**WORD**
Confidence Level	**99.898476**
Timestamp	**4000**
Detected text	**15.**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**4000**
Detected text	**REPRESENTATION**
Text Type	**WORD**
Confidence Level	**99.83993**
Timestamp	**4000**
Detected text	**LEARNING**
Text Type	**WORD**
Confidence Level	**99.462364**

Timestamp	4000
Detected text	rithm,
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	meaning
Text Type	WORD
Confidence Level	99.81998
Timestamp	4000
Detected text	that
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	it
Text Type	WORD
Confidence Level	99.991394
Timestamp	4000
Detected text	optimizes
Text Type	WORD
Confidence Level	99.81638
Timestamp	4000
Detected text	each
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	piece
Text Type	WORD

Confidence Level	100
Timestamp	4000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	solution
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	independently,
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	one
Text Type	WORD
Confidence Level	99.602554
Timestamp	4000
Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	4000

Detected text	**at**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**4000**
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Text Type	**WORD**
Confidence Level	**98.83863**
Timestamp	**4000**
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Text Type	**WORD**
Confidence Level	**99.94812**
Timestamp	**4000**
Detected text	**rather**
Text Type	**WORD**
Confidence Level	**99.93568**
Timestamp	**4000**
Detected text	**than**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**4000**
Detected text	**jointly**
Text Type	**WORD**
Confidence Level	**99.83282**
Timestamp	**4000**
Detected text	**optimizing**
Text Type	**WORD**
Confidence Level	**100**

Timestamp	4000
Detected text	all
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	pieces.
Text Type	WORD
Confidence Level	99.96772
Timestamp	4000
Detected text	It
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	is
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.67836
Timestamp	4000
Detected text	because
Text Type	WORD

Confidence Level	99.805046
Timestamp	4000
Detected text	these
Text Type	WORD
Confidence Level	99.92486
Timestamp	4000
Detected text	independent
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	pieces
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	are
Text Type	WORD
Confidence Level	99.97713
Timestamp	4000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	4000

Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	4000
Detected text	network.
Text Type	WORD
Confidence Level	99.32903
Timestamp	4000
Detected text	Specifically,
Text Type	WORD
Confidence Level	99.90197
Timestamp	4000
Detected text	greedy
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	deeplearningbook.org/contents,
Text Type	LINE
Confidence Level	97.558
Timestamp	5000
Detected text	+
Text Type	LINE
Confidence Level	97.60785

Timestamp	5000
Detected text	120%
Text Type	LINE
Confidence Level	99.32679
Timestamp	5000
Detected text	+
Text Type	LINE
Confidence Level	95.67633
Timestamp	5000
Detected text	Greedy layer-wise pretraining is greedy because it is a greedy a
Text Type	LINE
Confidence Level	99.84588
Timestamp	5000
Detected text	526
Text Type	LINE
Confidence Level	99.71677
Timestamp	5000
Detected text	CHAPTER 15. REPRESENTATION LEARNING
Text Type	LINE
Confidence Level	99.41034
Timestamp	5000
Detected text	rithm, meaning that it optimizes piece of the solution independen
Text Type	LINE
Confidence Level	99.97658

Timestamp	5000
Detected text	piece at a time, rather than joi optimizing all pieces. It is cal layer-wise
Text Type	LINE
Confidence Level	99.84755
Timestamp	5000
Detected text	because these independent piec the layers of the network. Speci greedy
Text Type	LINE
Confidence Level	99.71969
Timestamp	5000
Detected text	layer-wise pretraining proceeds at a time, training the k-th laye
Text Type	LINE
Confidence Level	99.79476
Timestamp	5000
Detected text	keeping the previous ones fixe particular, the lower layers (wh trained
Text Type	LINE
Confidence Level	99.96031
Timestamp	5000
Detected text	first) are not adapted after the layers are introduced. It is ca unsuper-
Text Type	LINE
Confidence Level	99.00477

Timestamp	5000
Detected text	deeplearningbook.org/contents/
Text Type	WORD
Confidence Level	97.558
Timestamp	5000
Detected text	+
Text Type	WORD
Confidence Level	97.60785
Timestamp	5000
Detected text	120%
Text Type	WORD
Confidence Level	99.32679
Timestamp	5000
Detected text	+
Text Type	WORD
Confidence Level	95.67633
Timestamp	5000
Detected text	Greedy
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	layer-wise
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	pretraining
Text Type	WORD

Confidence Level	99.903595
Timestamp	5000
Detected text	is
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	called
Text Type	WORD
Confidence Level	99.985695
Timestamp	5000
Detected text	greedy
Text Type	WORD
Confidence Level	99.89491
Timestamp	5000
Detected text	because
Text Type	WORD
Confidence Level	99.90023
Timestamp	5000
Detected text	it
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	is
Text Type	WORD
Confidence Level	99.94982
Timestamp	5000

Detected text	a
Text Type	WORD
Confidence Level	98.65405
Timestamp	5000
Detected text	greedy
Text Type	WORD
Confidence Level	99.86222
Timestamp	5000
Detected text	algo-
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	526
Text Type	WORD
Confidence Level	99.71677
Timestamp	5000
Detected text	CHAPTER
Text Type	WORD
Confidence Level	99.31348
Timestamp	5000
Detected text	15.
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	REPRESENTATION
Text Type	WORD
Confidence Level	99.2832

Timestamp	5000
Detected text	LEARNING
Text Type	WORD
Confidence Level	99.04468
Timestamp	5000
Detected text	rithm,
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	meaning
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	that
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	it
Text Type	WORD
Confidence Level	99.91345
Timestamp	5000
Detected text	optimizes
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	each
Text Type	WORD

Confidence Level	100
Timestamp	5000
Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	solution
Text Type	WORD
Confidence Level	99.86669
Timestamp	5000
Detected text	independently,
Text Type	WORD
Confidence Level	99.93874
Timestamp	5000
Detected text	one
Text Type	WORD
Confidence Level	100
Timestamp	5000

Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	at
Text Type	WORD
Confidence Level	99.82643
Timestamp	5000
Detected text	a
Text Type	WORD
Confidence Level	98.69601
Timestamp	5000
Detected text	time,
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	rather
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	than
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	jointly
Text Type	WORD
Confidence Level	100

Timestamp	5000
Detected text	optimizing
Text Type	WORD
Confidence Level	99.91825
Timestamp	5000
Detected text	all
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	pieces.
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	It
Text Type	WORD
Confidence Level	99.57256
Timestamp	5000
Detected text	is
Text Type	WORD
Confidence Level	99.8524
Timestamp	5000
Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	layer-wise
Text Type	WORD

Confidence Level	100
Timestamp	5000
Detected text	because
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	these
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	independent
Text Type	WORD
Confidence Level	99.83269
Timestamp	5000
Detected text	pieces
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	are
Text Type	WORD
Confidence Level	99.62011
Timestamp	5000
Detected text	the
Text Type	WORD
Confidence Level	99.84596
Timestamp	5000

Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	of
Text Type	WORD
Confidence Level	99.9558
Timestamp	5000
Detected text	the
Text Type	WORD
Confidence Level	99.96269
Timestamp	5000
Detected text	network.
Text Type	WORD
Confidence Level	97.41901
Timestamp	5000
Detected text	Specifically,
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	greedy
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	layer-wise
Text Type	WORD
Confidence Level	100

Timestamp	5000
Detected text	pretraining
Text Type	WORD
Confidence Level	99.85786
Timestamp	5000
Detected text	proceeds
Text Type	WORD
Confidence Level	99.94315
Timestamp	5000
Detected text	one
Text Type	WORD
Confidence Level	99.4511
Timestamp	5000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	at
Text Type	WORD
Confidence Level	99.6992
Timestamp	5000
Detected text	a
Text Type	WORD
Confidence Level	98.48981
Timestamp	5000
Detected text	time,
Text Type	WORD

Confidence Level	100
Timestamp	5000
Detected text	training
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	the
Text Type	WORD
Confidence Level	99.89081
Timestamp	5000
Detected text	k-th
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	while
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	keeping
Text Type	WORD
Confidence Level	100
Timestamp	5000

Detected text	the
Text Type	WORD
Confidence Level	99.89228
Timestamp	5000
Detected text	previous
Text Type	WORD
Confidence Level	99.967636
Timestamp	5000
Detected text	ones
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	fixed.
Text Type	WORD
Confidence Level	99.97286
Timestamp	5000
Detected text	In
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	particular,
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	the
Text Type	WORD
Confidence Level	100

Timestamp	5000
Detected text	lower
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	(which
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	are
Text Type	WORD
Confidence Level	99.65128
Timestamp	5000
Detected text	trained
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	first)
Text Type	WORD
Confidence Level	87.469505
Timestamp	5000
Detected text	are
Text Type	WORD

Confidence Level	99.84345
Timestamp	5000
Detected text	not
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	adapted
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	after
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	upper
Text Type	WORD
Confidence Level	99.77445
Timestamp	5000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	5000

Detected text	are
Text Type	WORD
Confidence Level	99.82535
Timestamp	5000
Detected text	introduced.
Text Type	WORD
Confidence Level	99.60763
Timestamp	5000
Detected text	It
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	is
Text Type	WORD
Confidence Level	99.7531
Timestamp	5000
Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	5000
Detected text	unsuper-
Text Type	WORD
Confidence Level	99.79325
Timestamp	6000
Detected text	deeplearningbook.org/contents
Text Type	LINE
Confidence Level	97.80194

Timestamp	6000
Detected text	+
Text Type	LINE
Confidence Level	97.60745
Timestamp	6000
Detected text	120%
Text Type	LINE
Confidence Level	99.328
Timestamp	6000
Detected text	+
Text Type	LINE
Confidence Level	95.6716
Timestamp	6000
Detected text	Greedy layer-wise pretraining is greedy because it is a greedy a
Text Type	LINE
Confidence Level	99.845665
Timestamp	6000
Detected text	526
Text Type	LINE
Confidence Level	99.71663
Timestamp	6000
Detected text	CHAPTER 15. REPRESENTATION LEARNING
Text Type	LINE
Confidence Level	99.41099
Timestamp	6000

Detected text	rithm, meaning that it optimizes piece of the solution independen
Text Type	LINE
Confidence Level	99.97673
Timestamp	6000
Detected text	piece at a time, rather than joi optimizing all pieces. It is cal layer-wise
Text Type	LINE
Confidence Level	99.84757
Timestamp	6000
Detected text	because these independent piec the layers of the network. Speci greedy
Text Type	LINE
Confidence Level	99.71955
Timestamp	6000
Detected text	layer-wise pretraining proceeds at a time, training the k-th laye
Text Type	LINE
Confidence Level	99.79291
Timestamp	6000
Detected text	keeping the previous ones fixe particular, the lower layers (wh trained
Text Type	LINE
Confidence Level	99.96037
Timestamp	6000

Detected text	first) are not adapted after the layers are introduced. It is ca unsuper-
Text Type	LINE
Confidence Level	99.011284
Timestamp	6000
Detected text	deeplearningbook.org/contents,
Text Type	WORD
Confidence Level	97.80194
Timestamp	6000
Detected text	+
Text Type	WORD
Confidence Level	97.60745
Timestamp	6000
Detected text	120%
Text Type	WORD
Confidence Level	99.328
Timestamp	6000
Detected text	+
Text Type	WORD
Confidence Level	95.6716
Timestamp	6000
Detected text	Greedy
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	layer-wise

Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	pretraining
Text Type	WORD
Confidence Level	99.90317
Timestamp	6000
Detected text	is
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	called
Text Type	WORD
Confidence Level	99.9858
Timestamp	6000
Detected text	greedy
Text Type	WORD
Confidence Level	99.89481
Timestamp	6000
Detected text	because
Text Type	WORD
Confidence Level	99.9008
Timestamp	6000
Detected text	it
Text Type	WORD
Confidence Level	100

Timestamp	6000
Detected text	is
Text Type	WORD
Confidence Level	99.95017
Timestamp	6000
Detected text	a
Text Type	WORD
Confidence Level	98.65174
Timestamp	6000
Detected text	greedy
Text Type	WORD
Confidence Level	99.86149
Timestamp	6000
Detected text	algo-
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	526
Text Type	WORD
Confidence Level	99.71663
Timestamp	6000
Detected text	CHAPTER
Text Type	WORD
Confidence Level	99.31407
Timestamp	6000
Detected text	15.
Text Type	WORD

Confidence Level	100
Timestamp	6000
Detected text	REPRESENTATION
Text Type	WORD
Confidence Level	99.28528
Timestamp	6000
Detected text	LEARNING
Text Type	WORD
Confidence Level	99.04459
Timestamp	6000
Detected text	rithm,
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	meaning
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	that
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	it
Text Type	WORD
Confidence Level	99.91633
Timestamp	6000

Detected text	optimizes
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	each
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	solution
Text Type	WORD
Confidence Level	99.866486
Timestamp	6000
Detected text	independently,
Text Type	WORD
Confidence Level	99.93795

Timestamp	6000
Detected text	one
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	at
Text Type	WORD
Confidence Level	99.82636
Timestamp	6000
Detected text	a
Text Type	WORD
Confidence Level	98.696
Timestamp	6000
Detected text	time,
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	rather
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	than
Text Type	WORD

Confidence Level	100
Timestamp	6000
Detected text	jointly
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	optimizing
Text Type	WORD
Confidence Level	99.91754
Timestamp	6000
Detected text	all
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	pieces.
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	It
Text Type	WORD
Confidence Level	99.5736
Timestamp	6000
Detected text	is
Text Type	WORD
Confidence Level	99.85248
Timestamp	6000

Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	layer-wise
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	because
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	these
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	independent
Text Type	WORD
Confidence Level	99.83261
Timestamp	6000
Detected text	pieces
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	are
Text Type	WORD
Confidence Level	99.62195

Timestamp	6000
Detected text	the
Text Type	WORD
Confidence Level	99.84602
Timestamp	6000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	of
Text Type	WORD
Confidence Level	99.95262
Timestamp	6000
Detected text	the
Text Type	WORD
Confidence Level	99.9625
Timestamp	6000
Detected text	network.
Text Type	WORD
Confidence Level	97.4189
Timestamp	6000
Detected text	Specifically,
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	greedy
Text Type	WORD

Confidence Level	100
Timestamp	6000
Detected text	layer-wise
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	pretraining
Text Type	WORD
Confidence Level	99.85761
Timestamp	6000
Detected text	proceeds
Text Type	WORD
Confidence Level	99.94286
Timestamp	6000
Detected text	one
Text Type	WORD
Confidence Level	99.45216
Timestamp	6000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	at
Text Type	WORD
Confidence Level	99.6986
Timestamp	6000

Detected text	a
Text Type	WORD
Confidence Level	98.4677
Timestamp	6000
Detected text	time,
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	training
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	the
Text Type	WORD
Confidence Level	99.88879
Timestamp	6000
Detected text	k-th
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	while
Text Type	WORD
Confidence Level	100

Timestamp	6000
Detected text	keeping
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	the
Text Type	WORD
Confidence Level	99.89222
Timestamp	6000
Detected text	previous
Text Type	WORD
Confidence Level	99.96666
Timestamp	6000
Detected text	ones
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	fixed.
Text Type	WORD
Confidence Level	99.97503
Timestamp	6000
Detected text	In
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	particular,
Text Type	WORD

Confidence Level	100
Timestamp	6000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	lower
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	(which
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	are
Text Type	WORD
Confidence Level	99.650856
Timestamp	6000
Detected text	trained
Text Type	WORD
Confidence Level	100
Timestamp	6000

Detected text	first)
Text Type	WORD
Confidence Level	87.56485
Timestamp	6000
Detected text	are
Text Type	WORD
Confidence Level	99.843025
Timestamp	6000
Detected text	not
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	adapted
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	after
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	upper
Text Type	WORD
Confidence Level	99.77459

Timestamp	6000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	are
Text Type	WORD
Confidence Level	99.82653
Timestamp	6000
Detected text	introduced.
Text Type	WORD
Confidence Level	99.60215
Timestamp	6000
Detected text	It
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	is
Text Type	WORD
Confidence Level	99.75337
Timestamp	6000
Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	6000
Detected text	unsuper-
Text Type	WORD

Confidence Level	99.79345
Timestamp	7000
Detected text	deeplearningbook.org/contents,
Text Type	LINE
Confidence Level	97.56989
Timestamp	7000
Detected text	+
Text Type	LINE
Confidence Level	97.71485
Timestamp	7000
Detected text	120%
Text Type	LINE
Confidence Level	99.33326
Timestamp	7000
Detected text	+
Text Type	LINE
Confidence Level	93.06171
Timestamp	7000
Detected text	CHAPTER 15. REPRESENTATION LEARNING
Text Type	LINE
Confidence Level	99.509026
Timestamp	7000
Detected text	rithm, meaning that it optimizes piece of the solution independen
Text Type	LINE
Confidence Level	99.93319

Timestamp	7000
Detected text	piece at a time, rather than joi optimizing all pieces. It is cal layer-wise
Text Type	LINE
Confidence Level	99.87707
Timestamp	7000
Detected text	because these independent piec the layers of the network. Speci greedy
Text Type	LINE
Confidence Level	99.94167
Timestamp	7000
Detected text	layer-wise pretraining proceeds at a time, training the k-th laye
Text Type	LINE
Confidence Level	99.841965
Timestamp	7000
Detected text	keeping the previous ones fixe particular, the lower layers (wh trained
Text Type	LINE
Confidence Level	99.91004
Timestamp	7000
Detected text	first) are not adapted after the layers are introduced. It is ca unsuper-
Text Type	LINE
Confidence Level	99.70953

Timestamp	7000
Detected text	vised because each layer is trair an unsupervised representation
Text Type	LINE
Confidence Level	99.691
Timestamp	7000
Detected text	algorithm. However, it
Text Type	LINE
Confidence Level	99.21178
Timestamp	7000
Detected text	deeplearningbook.org/contents.
Text Type	WORD
Confidence Level	97.56989
Timestamp	7000
Detected text	+
Text Type	WORD
Confidence Level	97.71485
Timestamp	7000
Detected text	120%
Text Type	WORD
Confidence Level	99.33326
Timestamp	7000
Detected text	+
Text Type	WORD
Confidence Level	93.06171
Timestamp	7000
Detected text	CHAPTER

Text Type	WORD
Confidence Level	99.600815
Timestamp	7000
Detected text	15.
Text Type	WORD
Confidence Level	99.988716
Timestamp	7000
Detected text	REPRESENTATION
Text Type	WORD
Confidence Level	98.94822
Timestamp	7000
Detected text	LEARNING
Text Type	WORD
Confidence Level	99.49835
Timestamp	7000
Detected text	rithm,
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	meaning
Text Type	WORD
Confidence Level	99.93228
Timestamp	7000
Detected text	that
Text Type	WORD
Confidence Level	100

Timestamp	7000
Detected text	it
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	optimizes
Text Type	WORD
Confidence Level	99.62509
Timestamp	7000
Detected text	each
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	solution
Text Type	WORD

Confidence Level	100
Timestamp	7000
Detected text	independently,
Text Type	WORD
Confidence Level	99.79934
Timestamp	7000
Detected text	one
Text Type	WORD
Confidence Level	99.84157
Timestamp	7000
Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	at
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	a
Text Type	WORD
Confidence Level	98.62357
Timestamp	7000
Detected text	time,
Text Type	WORD
Confidence Level	99.92971
Timestamp	7000

Detected text	rather
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	than
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	jointly
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	optimizing
Text Type	WORD
Confidence Level	99.79061
Timestamp	7000
Detected text	all
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	pieces.
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	It
Text Type	WORD
Confidence Level	100

Timestamp	7000
Detected text	is
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	called
Text Type	WORD
Confidence Level	99.93513
Timestamp	7000
Detected text	layer-wise
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	because
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	these
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	independent
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	pieces
Text Type	WORD

Confidence Level	100
Timestamp	7000
Detected text	are
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	network.
Text Type	WORD
Confidence Level	99.30015
Timestamp	7000

Detected text	Specifically,
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	greedy
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.95213
Timestamp	7000
Detected text	pretraining
Text Type	WORD
Confidence Level	99.69067
Timestamp	7000
Detected text	proceeds
Text Type	WORD
Confidence Level	99.84308
Timestamp	7000
Detected text	one
Text Type	WORD
Confidence Level	99.98866
Timestamp	7000
Detected text	layer
Text Type	WORD
Confidence Level	100

Timestamp	7000
Detected text	at
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	a
Text Type	WORD
Confidence Level	98.59649
Timestamp	7000
Detected text	time,
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	training
Text Type	WORD
Confidence Level	99.87451
Timestamp	7000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	k-th
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	layer
Text Type	WORD

Confidence Level	100
Timestamp	7000
Detected text	while
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	keeping
Text Type	WORD
Confidence Level	99.954475
Timestamp	7000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	previous
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	ones
Text Type	WORD
Confidence Level	99.87528
Timestamp	7000
Detected text	fixed.
Text Type	WORD
Confidence Level	99.53377
Timestamp	7000

Detected text	In
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	particular,
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	lower
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	(which
Text Type	WORD
Confidence Level	99.89073
Timestamp	7000
Detected text	are
Text Type	WORD
Confidence Level	99.6877

Timestamp	7000
Detected text	trained
Text Type	WORD
Confidence Level	99.888664
Timestamp	7000
Detected text	first)
Text Type	WORD
Confidence Level	97.677475
Timestamp	7000
Detected text	are
Text Type	WORD
Confidence Level	99.6626
Timestamp	7000
Detected text	not
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	adapted
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	after
Text Type	WORD
Confidence Level	99.95654
Timestamp	7000
Detected text	the
Text Type	WORD

Confidence Level	99.86784
Timestamp	7000
Detected text	upper
Text Type	WORD
Confidence Level	99.66953
Timestamp	7000
Detected text	layers
Text Type	WORD
Confidence Level	99.93625
Timestamp	7000
Detected text	are
Text Type	WORD
Confidence Level	99.8299
Timestamp	7000
Detected text	introduced.
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	It
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	is
Text Type	WORD
Confidence Level	99.69878
Timestamp	7000

Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	unsuper-
Text Type	WORD
Confidence Level	99.634514
Timestamp	7000
Detected text	vised
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	because
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	each
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	is
Text Type	WORD
Confidence Level	100

Timestamp	7000
Detected text	trained
Text Type	WORD
Confidence Level	100
Timestamp	7000
Detected text	with
Text Type	WORD
Confidence Level	99.801636
Timestamp	7000
Detected text	an
Text Type	WORD
Confidence Level	99.20798
Timestamp	7000
Detected text	unsupervised
Text Type	WORD
Confidence Level	99.720604
Timestamp	7000
Detected text	representation
Text Type	WORD
Confidence Level	99.15636
Timestamp	7000
Detected text	learning
Text Type	WORD
Confidence Level	98.71446
Timestamp	7000
Detected text	algorithm.
Text Type	WORD

Confidence Level	100
Timestamp	7000
Detected text	However,
Text Type	WORD
Confidence Level	97.635345
Timestamp	7000
Detected text	it
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	deeplearningbook.org/contents,
Text Type	LINE
Confidence Level	97.77871
Timestamp	8000
Detected text	+
Text Type	LINE
Confidence Level	97.63125
Timestamp	8000
Detected text	
Text Type	LINE
Confidence Level	81.24083
Timestamp	8000
Detected text	120%
Text Type	LINE
Confidence Level	99.230415
Timestamp	8000

Detected text	+
Text Type	LINE
Confidence Level	93.92879
Timestamp	8000
Detected text	CHAPTER 15. LEARNING
Text Type	LINE
Confidence Level	99.14018
Timestamp	8000
Detected text	rithm, meaning that it optimizes piece of the solution independer
Text Type	LINE
Confidence Level	99.903
Timestamp	8000
Detected text	piece at a time, rather than joi optimizing all pieces. It is cal layer-wise
Text Type	LINE
Confidence Level	99.80878
Timestamp	8000
Detected text	because these independent piece the layers of the network. Speci greedy
Text Type	LINE
Confidence Level	99.83099
Timestamp	8000
Detected text	layer-wise pretraining proceeds at a time, training the k-th laye
Text Type	LINE

Confidence Level	99.79601
Timestamp	8000
Detected text	keeping the previous ones fixe particular, the lower layers (wh trained
Text Type	LINE
Confidence Level	99.92416
Timestamp	8000
Detected text	first) are not adapted after the layers are introduced. It is ca unsuper-
Text Type	LINE
Confidence Level	99.78944
Timestamp	8000
Detected text	vised because each layer is trair an unsupervised representation
Text Type	LINE
Confidence Level	99.84441
Timestamp	8000
Detected text	algorithm. However, it
Text Type	LINE
Confidence Level	99.24461
Timestamp	8000
Detected text	deeplearningbook.org/contents,
Text Type	WORD
Confidence Level	97.77871
Timestamp	8000

Detected text	+
Text Type	WORD
Confidence Level	97.63125
Timestamp	8000
Detected text	
Text Type	WORD
Confidence Level	81.24083
Timestamp	8000
Detected text	120%
Text Type	WORD
Confidence Level	99.230415
Timestamp	8000
Detected text	+
Text Type	WORD
Confidence Level	93.92879
Timestamp	8000
Detected text	CHAPTER
Text Type	WORD
Confidence Level	98.99351
Timestamp	8000
Detected text	15.
Text Type	WORD
Confidence Level	99.62738
Timestamp	8000
Detected text	LEARNING
Text Type	WORD
Confidence Level	98.79967

Timestamp	8000
Detected text	rithm,
Text Type	WORD
Confidence Level	99.89607
Timestamp	8000
Detected text	meaning
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	that
Text Type	WORD
Confidence Level	99.92461
Timestamp	8000
Detected text	it
Text Type	WORD
Confidence Level	99.6252
Timestamp	8000
Detected text	optimizes
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	each
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	piece
Text Type	WORD

Confidence Level	100
Timestamp	8000
Detected text	of
Text Type	WORD
Confidence Level	99.938156
Timestamp	8000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	solution
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	independently,
Text Type	WORD
Confidence Level	99.9319
Timestamp	8000
Detected text	one
Text Type	WORD
Confidence Level	99.5201
Timestamp	8000
Detected text	piece
Text Type	WORD
Confidence Level	100
Timestamp	8000

Detected text	at
Text Type	WORD
Confidence Level	99.85027
Timestamp	8000
Detected text	a
Text Type	WORD
Confidence Level	98.54926
Timestamp	8000
Detected text	time,
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	rather
Text Type	WORD
Confidence Level	99.80312
Timestamp	8000
Detected text	than
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	jointly
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	optimizing
Text Type	WORD
Confidence Level	100

Timestamp	8000
Detected text	all
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	pieces.
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	It
Text Type	WORD
Confidence Level	99.63055
Timestamp	8000
Detected text	is
Text Type	WORD
Confidence Level	99.87478
Timestamp	8000
Detected text	called
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.61483
Timestamp	8000
Detected text	because
Text Type	WORD

Confidence Level	99.79047
Timestamp	8000
Detected text	these
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	independent
Text Type	WORD
Confidence Level	99.82212
Timestamp	8000
Detected text	pieces
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	are
Text Type	WORD
Confidence Level	99.991936
Timestamp	8000
Detected text	the
Text Type	WORD
Confidence Level	99.959175
Timestamp	8000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	8000

Detected text	of
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	network.
Text Type	WORD
Confidence Level	98.64661
Timestamp	8000
Detected text	Specifically,
Text Type	WORD
Confidence Level	99.76163
Timestamp	8000
Detected text	greedy
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	layer-wise
Text Type	WORD
Confidence Level	99.83388
Timestamp	8000
Detected text	pretraining
Text Type	WORD
Confidence Level	100

Timestamp	8000
Detected text	proceeds
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	one
Text Type	WORD
Confidence Level	99.49571
Timestamp	8000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	at
Text Type	WORD
Confidence Level	99.68826
Timestamp	8000
Detected text	a
Text Type	WORD
Confidence Level	98.40046
Timestamp	8000
Detected text	time,
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	training
Text Type	WORD

Confidence Level	100
Timestamp	8000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	k-th
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	layer
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	while
Text Type	WORD
Confidence Level	99.92978
Timestamp	8000
Detected text	keeping
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	8000

Detected text	previous
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	ones
Text Type	WORD
Confidence Level	99.40855
Timestamp	8000
Detected text	fixed.
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	In
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	particular,
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	lower
Text Type	WORD
Confidence Level	100

Timestamp	8000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	(which
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	are
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	trained
Text Type	WORD
Confidence Level	99.60543
Timestamp	8000
Detected text	first)
Text Type	WORD
Confidence Level	97.39656
Timestamp	8000
Detected text	are
Text Type	WORD
Confidence Level	99.958275
Timestamp	8000
Detected text	not
Text Type	WORD

Confidence Level	99.983
Timestamp	8000
Detected text	adapted
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	after
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	the
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	upper
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	layers
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	are
Text Type	WORD
Confidence Level	100
Timestamp	8000

Detected text	introduced.
Text Type	WORD
Confidence Level	99.874054
Timestamp	8000
Detected text	It
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	is
Text Type	WORD
Confidence Level	99.95279
Timestamp	8000
Detected text	called
Text Type	WORD
Confidence Level	99.88748
Timestamp	8000
Detected text	unsuper-
Text Type	WORD
Confidence Level	100
Timestamp	8000
Detected text	vised
Text Type	WORD
Confidence Level	99.9022
Timestamp	8000
Detected text	because
Text Type	WORD
Confidence Level	100

Timestamp	**8000**
Detected text	**each**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**8000**
Detected text	**layer**
Text Type	**WORD**
Confidence Level	**100**
Timestamp	**8000**
Detected text	**is**
Text Type	**WORD**
Confidence Level	**99.99078**
Timestamp	**8000**
Detected text	**trained**
Text Type	**WORD**
Confidence Level	**99.89396**