source

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get

**train-
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pro-
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dure**

enc
i
enc
i

**em-
bed-
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ma-
trix**

$1, \cdots, m$
$i \in$
$R^{e \times 1}$
m

**con-
vo-
lu-
tional
layer**

1

**bidi-
rec-
tional
en-
coder**

$\overleftrightarrow{enc}$
i
enc
i

$$enc_i = [\overleftarrow{enc}_i; \overrightarrow{enc}_i] \quad where \; enc_i \in R^{2h \times 1}, \overleftarrow{enc}_i, \overrightarrow{enc}_i \in R^{h \times 1} \quad 1 \le i \le m$$

$$enc_i = [\overleftarrow{enc}_i; \overrightarrow{enc}_i] \quad where \; enc_i \in R^{2h \times 1}, \overleftarrow{enc}_i, \overrightarrow{enc}_i \in R^{h \times 1} \quad 1 \le i \le m$$

**de-
coder**

dec_0
dec_0

2

$$\overrightarrow{dec}_0 = h [\overleftarrow{enc}_1; \overrightarrow{enc}_m] \quad where \; dec_0 \in R^{h \times 1}, h \in R^{h \times 2h}$$

$$\overrightarrow{dec}_0 = c [\overleftarrow{enc}_1; \overrightarrow{enc}_m] \quad where \; dec_0 \in R^{h \times 1}, c \in R^{h \times 2h}$$

t^{th}
t^{th}
$t \in$

Checkout
https://cs231n.github.io/convolutional-
networks
for
an
in-
depth
de-
scrip-
tion
for
con-
vo-
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tional
lay-
ers
if
you
are
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fa-
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If