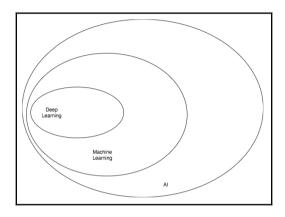
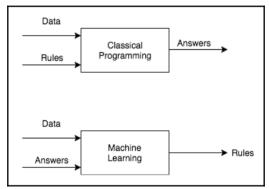
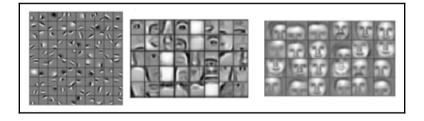
# **Chapter 1: Getting Started with Deep Learning Using PyTorch**







#### **Source Text**

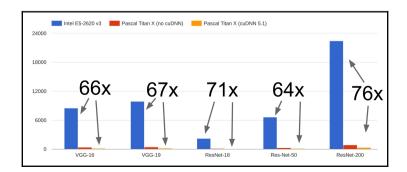
munster have signed new zealand international francis saili on a two-year deal . utility back saili, who made his all blacks debut against argentina in 2013, will move to the province later this year after the completion of his 2015 contractual commitments . the 24-year-old currently plays for auckland-based super rugby side the blues and was part of the new zealand under-20 side that won the junior world championship in italy in 2011 . saili 's signature is something of a coup for munster and head coach anthony foley believes he will be a great addition to their backline . francis saili has signed a two-year deal to join munster and will link up with them later this year . 'we are really pleased that francis has committed his future to the province , 'foley told munster' sofficial website . 'he is a talented centre with an impressive skill-set and he possesses the physical attributes to excel in the morthern hemisphere .' i believe he will be a great addition to our backline and we look forward to welcoming him to munster .' saili has been capped twice by new zealand and was part of the under 20 side that won the junior championship in 2011 . saili , who joins all black team-mates dan carter , ma'a nonu , conrad smith and charles piutau in agreeing to ply his trade in the northern hemisphere , is looking forward to a fresh challenge . he said : 'i believe this is a fantastic opportunity for me and i am fortunate to move to a club held in such high regard , with values and traditions i can relate to from my time here in the blues .' this experience will stand to me as a player and i believe i can continue to improve and grow within the munster set-up .' as difficult as it is to leave the blues i look forward to the exciting ofhallenge ahead .''

#### **Reference summary**

utility back francis saili will join up with munster later this year . the new zealand international has signed a two-year contract . saili made his debut for the all blacks against argentina in 2013 .

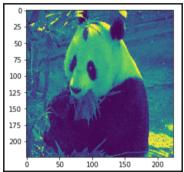


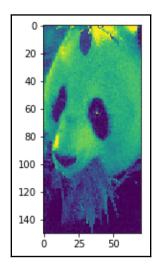
"two young girls are playing with lego toy."

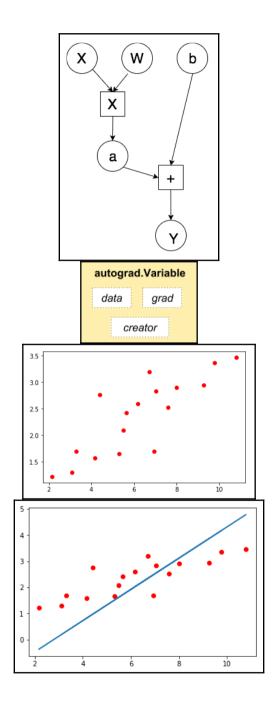


## **Chapter 2: Building Blocks of Neural Networks**

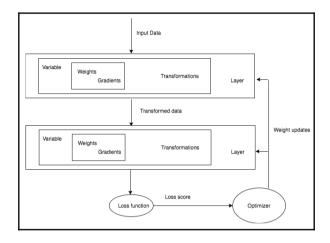


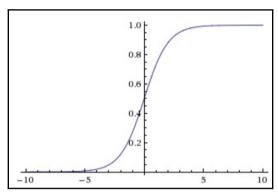


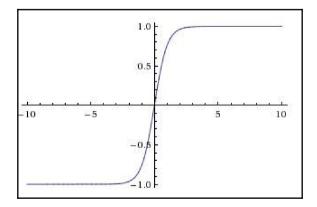


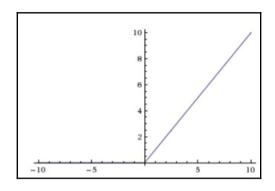


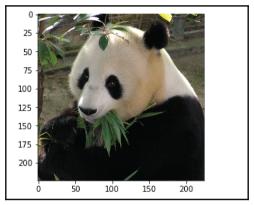
### **Chapter 3: Diving Deep into Neural Networks**





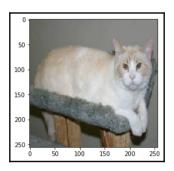






```
chapter3/
dogsandcats/
train/
dog.183.jpg
cat.2.jpg
cat.17.jpg
dog.186.jpg
cat.27.jpg
dog.193.jpg
```

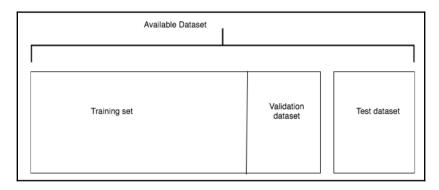
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        valid/
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            cat /
                cat.172.jpg
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                cat.21.jpg
```

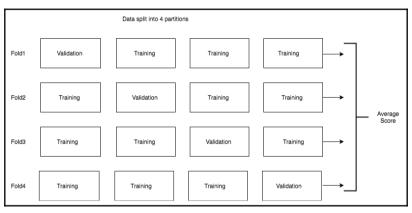


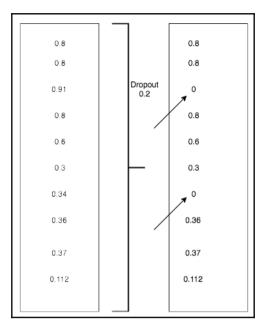
```
(\texttt{conv1}) \colon \texttt{Conv2d}(\texttt{3, 64, kernel\_size=(7, 7), stride=(2, 2), padding=(3, 3), bias=False)}
(bn1): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True)
(relu): ReLU (inplace)
(maxpool): MaxPool2d (size=(3, 3), stride=(2, 2), padding=(1, 1), dilation=(1, 1))
(layer1): Sequential (
  (0): BasicBlock (
    (conv1): Conv2d(64, 64, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (bn1): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True)
    (relu): ReLU (inplace)
    (conv2): Conv2d(64, 64, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (bn2): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True)
  (1): BasicBlock (
    (conv1): Conv2d(64, 64, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False) (bnl): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True)
    (relu): ReLU (inplace)
    (conv2): Conv2d(64, 64, kernel size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (bn2): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=True)
(layer2): Sequential (
  (0): BasicBlock (
    (conv1): Conv2d(64, 128, kernel_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
    (bn1): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=True)
```

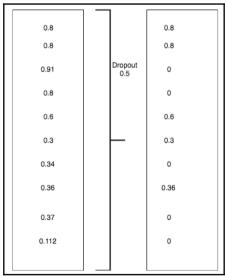
I 7 I

# **Chapter 4: Fundamentals of Machine Learning**

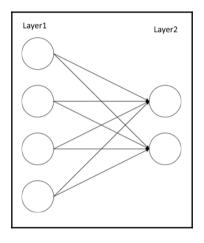


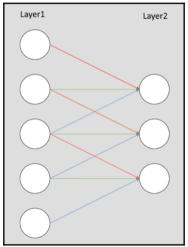


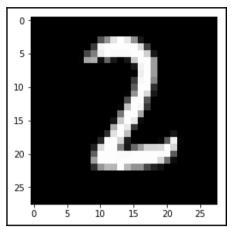


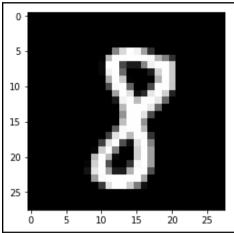


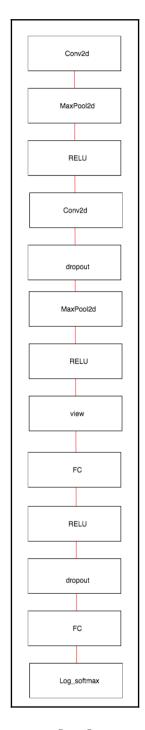
## **Chapter 5: Deep Learning for Computer Vision**

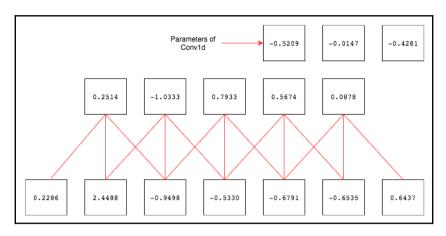


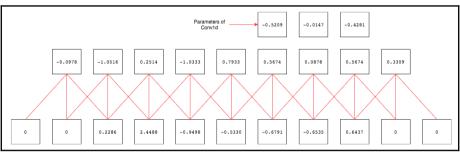




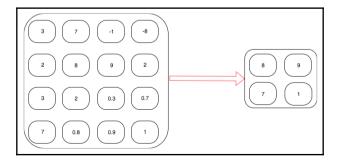


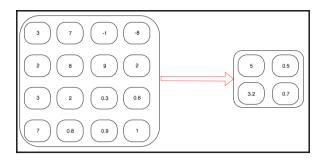


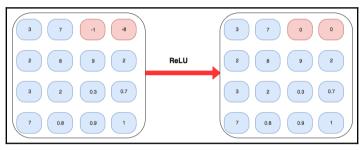


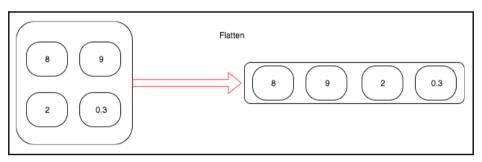


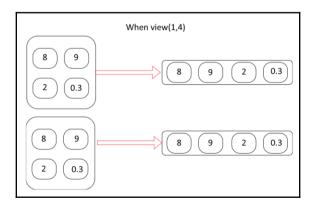
0.8643	-0.9223	-0.6164	-0.0553	-0.1823	-0.9787		Kernel	
-0.3225	-1.69	0.9717	0.9717	-1.6914	0.2931	0	0	
0.1787	0.6866	0.1085	-0.4997	0.7529	2.0344	-1	-1	-:
-0.4454333	0.967	0.8795	-0.3055	0.5616	3.4627	0.1	0.2	0.3
-0.7882333	1.77145	1.24195	-0.5277	1.0292	4.96925			
-1.1310333	2.5759	1.6044	-0.7499	1.4968	6.4758			
	0							
	Output							
0.61214								

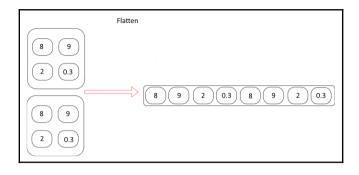


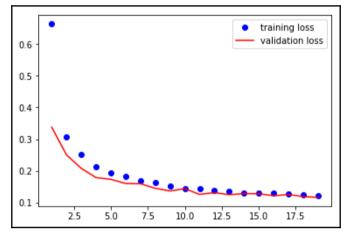


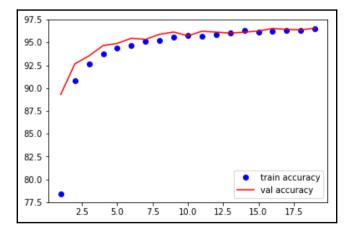


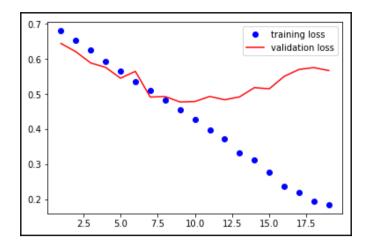


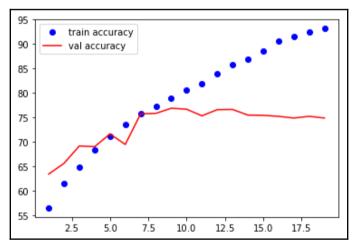


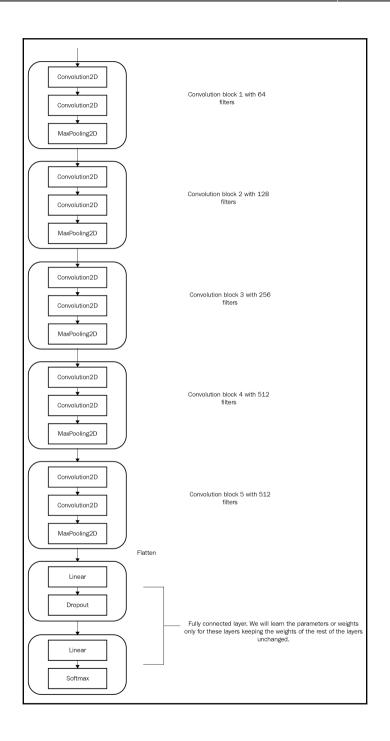


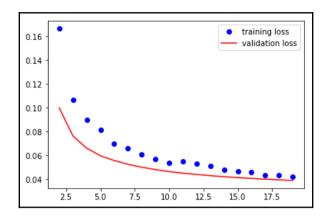


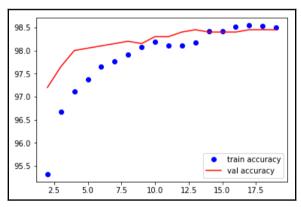


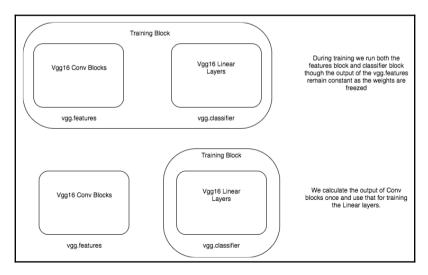


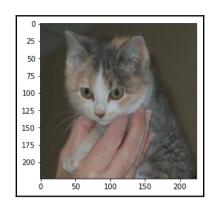


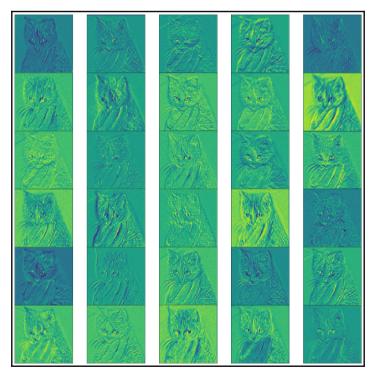


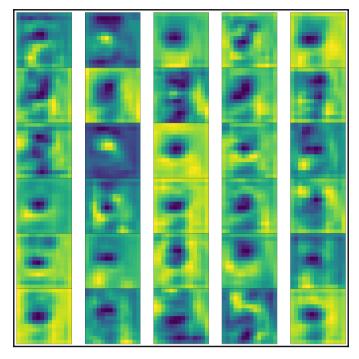


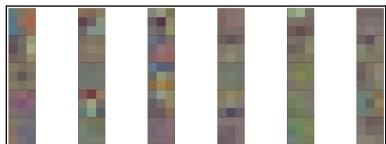




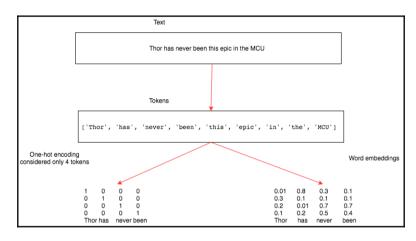


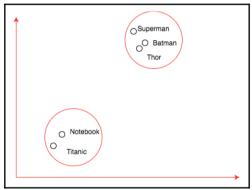


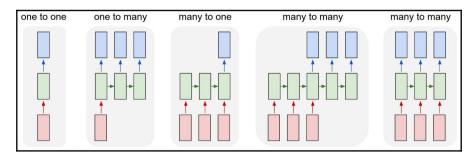


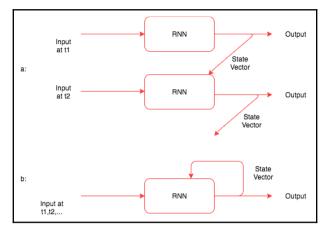


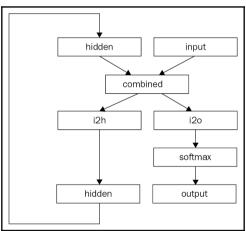
## **Chapter 6: Deep Learning with Sequence Data and Text**

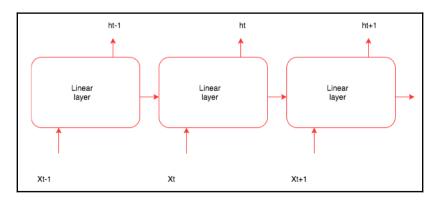


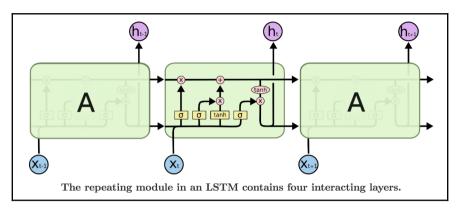


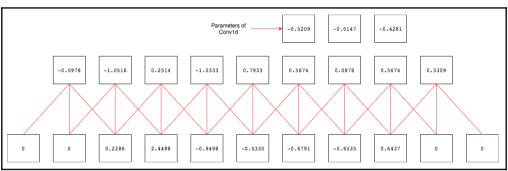












## **Chapter 7: Generative Networks**



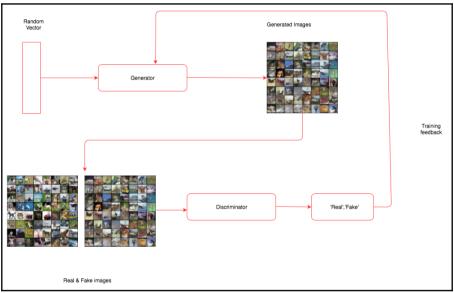


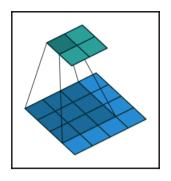


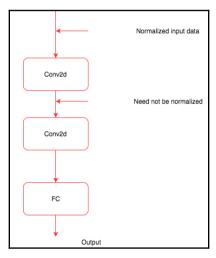
Batch_size	Channels	\	/alues	
	1	0.1	0.1	0.1
		0.2	0.2	0.2
		0.3	0.3	0.3
	2	0.2	0.2	0.2
1		0.2	0.2	0.2
		0.2	0.2	0.2
	3	0.3	0.3	0.3
		0.3	0.3	0.3
		0.3	0.3	0.3
	1	0.1	0.1	0.1
		0.2	0.2	0.2
		0.3	0.3	0.3
	2	0.2	0.2	
2		0.2	0.2	0.2
		0.2	0.2	0.2
	3	0.3	0.3	
		0.3	0.3	0.3
		0.3	0.3	0.3

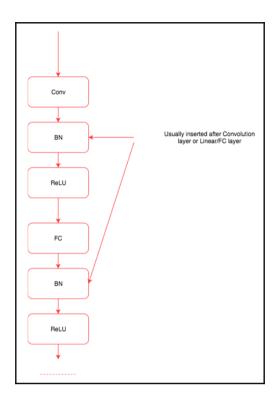
Batch_size	Channels	BMM(Gram Matrix, Transpose(Gram Matrix))
	1	(0.1,0.1,0.1,0.2,0.2,0.2,0.3,0.3,0.3,)
1	2	(0.2,0.2,0.2,0.2,0.2,0.2,0.2,0.2,0.2)
	3	(0.3,0.3,0.3,0.3,0.3,0.3,0.3,0.3)
	1	(0.1,0.1,0.1,0.2,0.2,0.2,0.3,0.3,0.3,)
2	2	(0.2,0.2,0.2,0.2,0.2,0.2,0.2,0.2,0.2)
	3	(0.3,0.3,0.3,0.3,0.3,0.3,0.3,0.3)



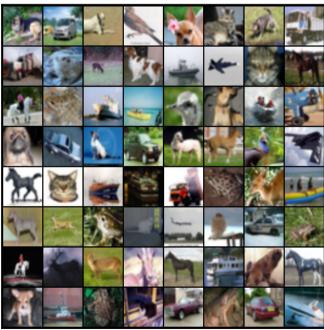






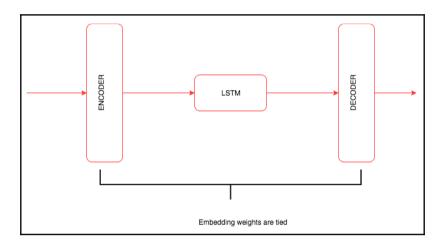




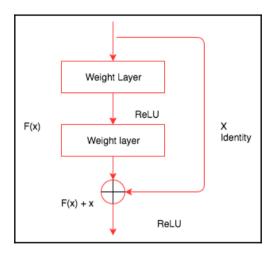


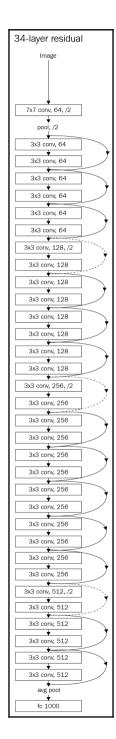
As with previous quibe Chronicles games, Valkyria Chronicles III is a tactical role @-@ playing game where players take control of a military unit and take part in missions against enemy forces. Stories are through and replayed as they are unlocked. The route to each story location on the may varies depending on an individual player 's approach: when one option is selected, the other is scaled off for the play unlocked, some of them having a higher difficulty than those found in the rest of the game. There are also locate related to the game 's beard cause. Although they take a very minor ro The game 's battle system, the cumb- system, is carried over directly from cumb- Chronicles. During missions, players select each unit using a top @-d down perspective of the battlefield map: once a char by their Action cumb-. Us to raine characters can be assigned to a single mission. During memplay, characters will call out if something happens to them, such as their health points; (MP) getting low or , and "Battle Potentials", which are grown throughout the game and always grant cumb- to a character. Or learn Battle Potentials, each Character has a unique "Mosters Table", a grid @-Q based skill to her" "Valkyris form" and become cumbs, while Imac can target unlikiple enemy unlike with her her havey weapon.

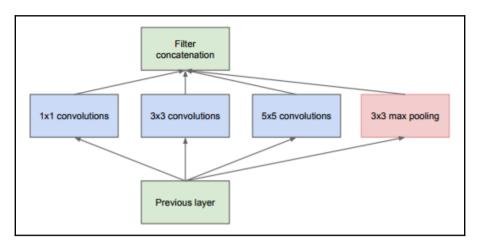
Troops are divided into five classes: Scouts, «uni», Engineers, «uni» and Armored Soldier. «uni» can switch classes by changing their assigned weapon. Changing class does not greatly affect the stats game.

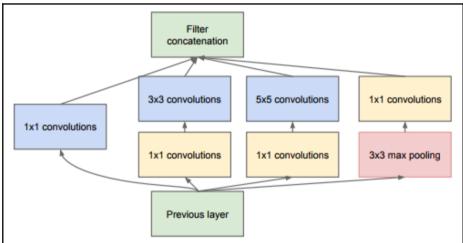


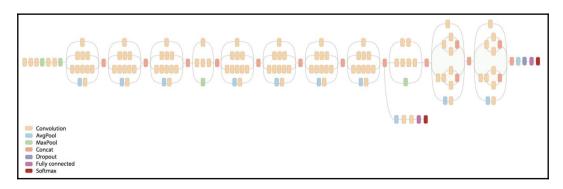
### **Chapter 8: Modern Network Architectures**

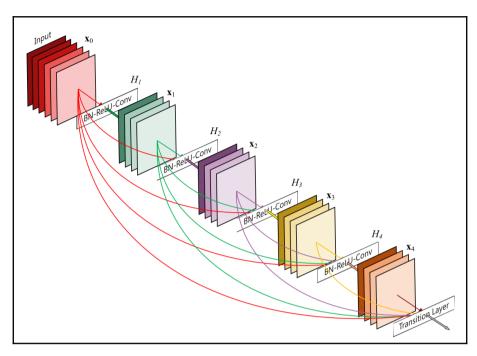


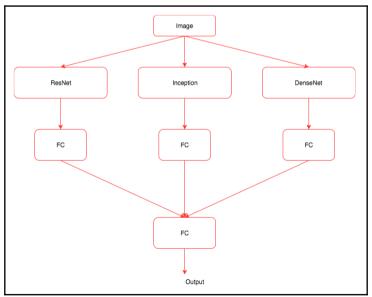


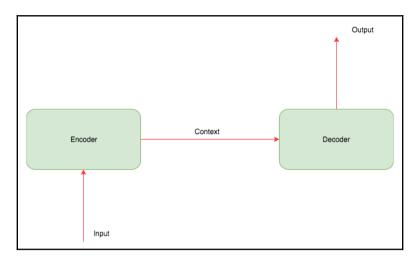


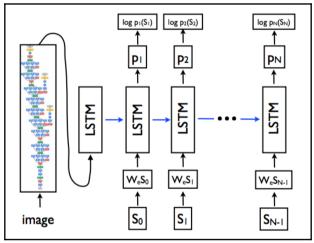












#### **Chapter 9: What Next?**



