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| **Sr. No.** | **Topic** | **Resources** |
|  | Building blocks of CNNs | [**Link**](https://www.google.com/search?q=Building+blocks+of+CNNs&rlz=1C1VDKB_enIN991IN991&oq=Building+blocks+of+CNNs&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIICAEQABgWGB4yDQgCEAAYhgMYgAQYigUyDQgDEAAYhgMYgAQYigUyDQgEEAAYhgMYgAQYigUyCggFEAAYgAQYogQyCggGEAAYgAQYogQyCggHEAAYgAQYogQyCggIEAAYgAQYogTSAQgxMzI2ajBqOagCALACAA&sourceid=chrome&ie=UTF-8) |
|  | convolution / pooling layers | [**Link**](https://www.google.com/search?q=convolution+%2F+pooling+layers&rlz=1C1VDKB_enIN991IN991&oq=convolution+%2F+pooling+layers&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIICAEQABgWGB4yCAgCEAAYFhgeMg0IAxAAGIYDGIAEGIoFMg0IBBAAGIYDGIAEGIoFMgoIBRAAGIAEGKIE0gEHODMyajBqOagCALACAQ&sourceid=chrome&ie=UTF-8) |
|  | Padding | [**Link**](https://www.google.com/search?q=padding+in+cnn&rlz=1C1VDKB_enIN991IN991&oq=Padding+&gs_lcrp=EgZjaHJvbWUqDAgBEAAYQxiABBiKBTIGCAAQRRg5MgwIARAAGEMYgAQYigUyDQgCEAAYkQIYgAQYigUyCggDEAAYsQMYgAQyDQgEEAAYkQIYgAQYigUyBwgFEAAYgAQyBwgGEAAYgAQyCggHEAAYsQMYgAQyBwgIEAAYgAQyBwgJEAAYgATSAQgxNjU1ajBqOagCALACAA&sourceid=chrome&ie=UTF-8) |
|  | Strided convolutions | [**Link**](https://www.google.com/search?q=Strided+convolutions&rlz=1C1VDKB_enIN991IN991&oq=Strided+convolutions+&gs_lcrp=EgZjaHJvbWUyCggAEEUYFhgeGDkyCQgBEAAYDRiABDIJCAIQABgNGIAEMggIAxAAGBYYHjIICAQQABgWGB4yCAgFEAAYFhgeMggIBhAAGBYYHjIKCAcQABgKGBYYHjIKCAgQABgFGA0YHjIKCAkQABgFGA0YHtIBCDIyOTVqMGo5qAIAsAIA&sourceid=chrome&ie=UTF-8) |
|  | Convolutions over volumes | [**Link**](https://www.google.com/search?q=Convolutions+over+volumes&rlz=1C1VDKB_enIN991IN991&oq=Convolutions+over+volumes&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTINCAEQABiGAxiABBiKBTINCAIQABiGAxiABBiKBTINCAMQABiGAxiABBiKBTINCAQQABiGAxiABBiKBTIKCAUQABiABBiiBDIKCAYQABiABBiiBNIBCDE1NTdqMGo5qAIAsAIA&sourceid=chrome&ie=UTF-8) |
|  | SoftMax regression | [**Link**](https://www.google.com/search?q=SoftMax+regression&rlz=1C1VDKB_enIN991IN991&oq=SoftMax+regression+&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQABiABDIHCAIQABiABDIHCAMQABiABDIHCAQQABiABDIHCAUQABiABDIHCAYQABiABDIHCAcQABiABDIHCAgQABiABDIHCAkQABiABNIBCTI1NzA0ajBqOagCALACAA&sourceid=chrome&ie=UTF-8) |
|  | Deep Learning frameworks | [**Link**](https://www.google.com/search?q=deep+learning+frameworks&rlz=1C1VDKB_enIN991IN991&oq=Deep+Learning+frameworks&gs_lcrp=EgZjaHJvbWUqBwgAEAAYgAQyBwgAEAAYgAQyBwgBEAAYgAQyBwgCEAAYgAQyBwgDEAAYgAQyCAgEEAAYFhgeMggIBRAAGBYYHjIICAYQABgWGB4yCAgHEAAYFhgeMggICBAAGBYYHjIICAkQABgWGB7SAQc2MzhqMGo5qAIAsAIA&sourceid=chrome&ie=UTF-8) |
|  | Training and testing on different distributions | [**Link**](https://www.google.com/search?q=Training+and+testing+on+different+distributions&rlz=1C1VDKB_enIN991IN991&oq=Training+and+testing+on+different+distributions+&gs_lcrp=EgZjaHJvbWUyCggAEEUYFhgeGDkyDQgBEAAYhgMYgAQYigUyCggCEAAYogQYiQUyCggDEAAYgAQYogQyCggEEAAYgAQYogTSAQgxMTI3ajBqOagCALACAA&sourceid=chrome&ie=UTF-8) |
|  | Bias and Variance with mismatched data distributions | [**Link**](https://www.google.com/search?q=bias+and+variance+with+mismatched+data+distributions&rlz=1C1VDKB_enIN991IN991&oq=Bias+and+Variance+with+mismatched+data+distribution+&gs_lcrp=EgZjaHJvbWUqCAgBEAAYFhgeMgYIABBFGDkyCAgBEAAYFhgeMg0IAhAAGIYDGIAEGIoFMg0IAxAAGIYDGIAEGIoFMg0IBBAAGIYDGIAEGIoFMg0IBRAAGIYDGIAEGIoFMgoIBhAAGIAEGKIEMgcIBxAAGO8FMgcICBAAGO8FMgcICRAAGO8F0gEIMTYyMmowajmoAgCwAgA&sourceid=chrome&ie=UTF-8) |
|  | Transfer learning | [**Link**](https://www.google.com/search?q=transfer+learning+in+cnn&rlz=1C1VDKB_enIN991IN991&oq=Transfer+learning+&gs_lcrp=EgZjaHJvbWUqDAgEEAAYFBiHAhiABDIGCAAQRRg5MgwIARAAGBQYhwIYgAQyBwgCEAAYgAQyBwgDEAAYgAQyDAgEEAAYFBiHAhiABDIHCAUQABiABDIHCAYQABiABDIGCAcQRRg80gEINDE1OGowajmoAgCwAgA&sourceid=chrome&ie=UTF-8) |
|  | Multi-task learning | [**Link**](https://www.google.com/search?q=multi-task+learning&rlz=1C1VDKB_enIN991IN991&oq=Multi-task+learning&gs_lcrp=EgZjaHJvbWUqDQgAEAAYkQIYgAQYigUyDQgAEAAYkQIYgAQYigUyDQgBEAAYkQIYgAQYigUyBwgCEAAYgAQyBwgDEAAYgAQyBwgEEAAYgAQyBwgFEAAYgAQyBwgGEAAYgAQyBggHEEUYPNIBCDI0NzdqMGo5qAIAsAIA&sourceid=chrome&ie=UTF-8) |
|  | end-to-end deep learning | [**Link**](https://www.google.com/search?q=end-to-end+deep+learning&rlz=1C1VDKB_enIN991IN991&oq=end-to-end+deep+learning&gs_lcrp=EgZjaHJvbWUyCQgAEEUYORiABDIHCAEQABiABDIHCAIQABiABDIICAMQABgWGB4yCAgEEAAYFhgeMggIBRAAGBYYHjIICAYQABgWGB4yCAgHEAAYFhgeMggICBAAGBYYHjIICAkQABgWGB7SAQgxNDg2ajBqOagCALACAA&sourceid=chrome&ie=UTF-8) |
|  | Introduction to CNN models: LeNet – 5 | [**Link**](https://www.google.com/search?q=Introduction+to+CNN+models%3A+LeNet+%E2%80%93+5&rlz=1C1VDKB_enIN991IN991&oq=Introduction+to+CNN+models%3A+LeNet+%E2%80%93+5&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIHCAEQIRiPAtIBBzg5NGowajmoAgCwAgA&sourceid=chrome&ie=UTF-8) |
|  | AlexNet | [**Link**](https://www.google.com/search?q=alexnet&rlz=1C1VDKB_enIN991IN991&oq=AlexNet&gs_lcrp=EgZjaHJvbWUqEAgAEAAYkQIYsQMYgAQYigUyEAgAEAAYkQIYsQMYgAQYigUyDAgBEAAYFBiHAhiABDINCAIQABiRAhiABBiKBTIMCAMQABhDGIAEGIoFMg0IBBAAGJECGIAEGIoFMgwIBRAAGEMYgAQYigUyDAgGEAAYQxiABBiKBTIMCAcQABhDGIAEGIoFMgwICBAAGEMYgAQYigUyDAgJEAAYQxiABBiKBdIBCDM0OTNqMGo5qAIAsAIA&sourceid=chrome&ie=UTF-8) |
|  | VGG – 16 | [**Link**](https://www.google.com/search?q=VGG+%E2%80%93+16&rlz=1C1VDKB_enIN991IN991&oq=VGG+%E2%80%93+16&gs_lcrp=EgZjaHJvbWUqBggAEEUYOzIGCAAQRRg7MgwIARAAGA0YsQMYgAQyCQgCEAAYDRiABDIJCAMQABgNGIAEMgkIBBAAGA0YgAQyCQgFEAAYDRiABDIJCAYQABgNGIAEMgkIBxAAGA0YgAQyCQgIEAAYDRiABDIJCAkQABgNGIAE0gEIMTI3N2owajmoAgCwAgE&sourceid=chrome&ie=UTF-8) |
|  | Residual Networks | [**Link**](https://www.google.com/search?q=residual+networks+(resnet)&rlz=1C1VDKB_enIN991IN991&oq=Residual+Networks&gs_lcrp=EgZjaHJvbWUqDQgBEAAYkQIYgAQYigUyCQgAEEUYORiABDINCAEQABiRAhiABBiKBTIHCAIQABiABDIHCAMQABiABDIICAQQABgWGB4yCAgFEAAYFhgeMggIBhAAGBYYHjIICAcQABgWGB4yCAgIEAAYFhgeMggICRAAGBYYHtIBCDEzMTFqMGo5qAIAsAIA&sourceid=chrome&ie=UTF-8) |