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| Deep Learning | |
| **SOURCE: 01** | **Deep Learning (MIT 6.S191)** |
| 01 | [MIT Introduction to Deep Learning](https://www.youtube.com/watch?v=ErnWZxJovaM&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=1&pp=iAQB) |
| 02 | [Recurrent Neural Networks, Transformers, and Attention](https://www.youtube.com/watch?v=dqoEU9Ac3ek&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=2&pp=iAQB) |
| 03 | [Convolutional Neural Networks](https://www.youtube.com/watch?v=2xqkSUhmmXU&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=3&pp=iAQB) |
| 04 | [Deep Generative Modeling](https://www.youtube.com/watch?v=Dmm4UG-6jxA&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=4&pp=iAQB) |
| 05 | [Reinforcement Learning](https://www.youtube.com/watch?v=8JVRbHAVCws&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=5&pp=iAQB) |
| 06 | [Language Models and New Frontiers](https://www.youtube.com/watch?v=N1fbskTpwZ0&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=6&pp=iAQB) |
| 07 | [Google Generative AI for Media](https://www.youtube.com/watch?v=P7Hkh2zOGQ0&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=7&pp=iAQB) |
| 08 | [Building AI Models in the Wild](https://www.youtube.com/watch?v=ZAGiinWiFsE&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=8&pp=iAQB) |
| 09 | [Introduction to Deep Learning (2023)](https://www.youtube.com/watch?v=QDX-1M5Nj7s&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=9&pp=iAQB) |
| 10 | [Recurrent Neural Networks, Transformers, and Attention](https://www.youtube.com/watch?v=ySEx_Bqxvvo&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=10&pp=iAQB) |
| 11 | [Convolutional Neural Networks](https://www.youtube.com/watch?v=NmLK_WQBxB4&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=11&pp=iAQB) |
| 12 | [Deep Generative Modeling](https://www.youtube.com/watch?v=3G5hWM6jqPk&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=12&pp=iAQB) |
| 13 | [Robust and Trustworthy Deep Learning](https://www.youtube.com/watch?v=kIiO4VSrivU&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=13&pp=iAQB) |
| 14 | [Reinforcement Learning](https://www.youtube.com/watch?v=AhyznRSDjw8&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=14&pp=iAQB) |
| 15 | [Deep Learning New Frontiers](https://www.youtube.com/watch?v=FHeCmnNe0P8&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=15&pp=iAQB) |
| 16 | [Text-to-Image Generation](https://www.youtube.com/watch?v=SA-v6Op2kL4&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=16&pp=iAQB) |
| 17 | [The Modern Era of Statistics](https://www.youtube.com/watch?v=p1NpGC8K-vs&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=17&pp=iAQB) |
| 18 | [The Future of Robot Learning](https://www.youtube.com/watch?v=WHvWSYKGMDQ&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=18&pp=iAQB) |
| 19 | [Introduction to Deep Learning (2022)](https://www.youtube.com/watch?v=7sB052Pz0sQ&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=19&pp=iAQB) |
| 20 | [Recurrent Neural Networks and Transformers](https://www.youtube.com/watch?v=QvkQ1B3FBqA&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=20&pp=iAQB) |
| 21 | [Convolutional Neural Networks](https://www.youtube.com/watch?v=uapdILWYTzE&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=21&pp=iAQB) |
| 22 | [Deep Generative Modeling](https://www.youtube.com/watch?v=QcLlc9lj2hk&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=22&pp=iAQB) |
| 23 | [Reinforcement Learning](https://www.youtube.com/watch?v=-WbN61qtTGQ&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=23&pp=iAQB) |
| 24 | [Deep Learning New Frontiers](https://www.youtube.com/watch?v=wySXLRTxAGQ&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=24&pp=iAQB) |
| 25 | [LiDAR for Autonomous Driving](https://www.youtube.com/watch?v=NHZMfSMAHlo&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=25&pp=iAQB) |
| 26 | [Automatic Speech Recognition](https://www.youtube.com/watch?v=sR6_bZ6VkAg&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=26&pp=iAQB) |
| 27 | [AI for Science](https://www.youtube.com/watch?v=QZxcTZj0L-M&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=27&pp=iAQB) |
| 28 | [Uncertainty in Deep Learning](https://www.youtube.com/watch?v=veYq6EWZyVc&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=28&pp=iAQB) |
| 29 | [Introduction to Deep Learning (2021)](https://www.youtube.com/watch?v=5tvmMX8r_OM&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=29&pp=iAQB) |
| 30 | [Recurrent Neural Networks](https://www.youtube.com/watch?v=qjrad0V0uJE&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=30&pp=iAQB) |
| 31 | [Convolutional Neural Networks](https://www.youtube.com/watch?v=AjtX1N_VT9E&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=31&pp=iAQB) |
| 32 | [Deep Generative Modeling](https://www.youtube.com/watch?v=BUNl0To1IVw&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=32&pp=iAQB) |
| 33 | [Reinforcement Learning](https://www.youtube.com/watch?v=93M1l_nrhpQ&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=33&pp=iAQB) |
| 34 | [Deep Learning New Frontiers](https://www.youtube.com/watch?v=-boCMDouF2g&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=34&pp=iAQB) |
| 35 | [Evidential Deep Learning and Uncertainty](https://www.youtube.com/watch?v=toTcf7tZK8c&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=35&pp=iAQB) |
| 36 | [AI Bias and Fairness](https://www.youtube.com/watch?v=wmyVODy_WD8&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=36&pp=iAQB) |
| 37 | [Deep CPCFG for Information Extraction](https://www.youtube.com/watch?v=WkUYsVC3hKI&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=37&pp=iAQB) |
| 38 | [Taming Dataset Bias via Domain Adaptation](https://www.youtube.com/watch?v=eS-OHAHOqU0&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=38&pp=iAQB) |
| 39 | [Towards AI for 3D Content Creation](https://www.youtube.com/watch?v=lkkFcg9k9ho&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=39&pp=iAQB) |
| 40 | [AI in Healthcare](https://www.youtube.com/watch?v=cvXVK8oqU4Q&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=40&pp=iAQB) |
| 41 | [Introduction to Deep Learning (2020)](https://www.youtube.com/watch?v=njKP3FqW3Sk&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=41&pp=iAQB) |
| 42 | [Recurrent Neural Networks](https://www.youtube.com/watch?v=SEnXr6v2ifU&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=42&pp=iAQB) |
| 43 | [Convolutional Neural Networks](https://www.youtube.com/watch?v=iaSUYvmCekI&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=43&pp=iAQB) |
| 44 | [Deep Generative Modeling](https://www.youtube.com/watch?v=rZufA635dq4&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=44&pp=iAQB) |
| 45 | [Reinforcement Learning](https://www.youtube.com/watch?v=nZfaHIxDD5w&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=45&pp=iAQB) |
| 46 | [Deep Learning New Frontiers](https://www.youtube.com/watch?v=tfM_DdbGTLs&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=46&pp=iAQB) |
| 47 | [Neuro-symbolic AI](https://www.youtube.com/watch?v=4PuuziOgSU4&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=47&pp=iAQB) |
| 48 | [Generalizable Autonomy for Robot Manipulation](https://www.youtube.com/watch?v=8Kn4Gi8iSYQ&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=48&pp=iAQB) |
| 49 | [Neural Rendering](https://www.youtube.com/watch?v=BCZ56MU-KhQ&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=49&pp=iAQB) |
| 50 | [Machine Learning for Scent](https://www.youtube.com/watch?v=Z5Pw5eWItiw&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=50&pp=iAQB) |
| 51 | [Introduction to Deep Learning (2019)](https://www.youtube.com/watch?v=5v1JnYv_yWs&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=52&pp=iAQB) |
| 52 | [Recurrent Neural Networks](https://www.youtube.com/watch?v=_h66BW-xNgk&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=53&pp=iAQB) |
| 53 | [Convolutional Neural Networks](https://www.youtube.com/watch?v=H-HVZJ7kGI0&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=54&pp=iAQB) |
| 54 | [Deep Generative Modeling](https://www.youtube.com/watch?v=yFBFl1cLYx8&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=55&pp=iAQB) |
| 55 | [Deep Reinforcement Learning](https://www.youtube.com/watch?v=i6Mi2_QM3rA&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=56&pp=iAQB) |
| 56 | [Deep Learning Limitations and New Frontiers](https://www.youtube.com/watch?v=INja7C5_vqk&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=57&pp=iAQB) |
| 57 | [Visualization for Machine Learning (Google Brain)](https://www.youtube.com/watch?v=ulLx2iPTIcs&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=58&pp=iAQB) |
| 58 | [Biologically Inspired Neural Networks (IBM)](https://www.youtube.com/watch?v=4lY-oAY0aQU&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=59&pp=iAQB) |
| 59 | [Image Domain Transfer (NVIDIA)](https://www.youtube.com/watch?v=_MzaThb_jno&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=60&pp=iAQB) |
| 60 | [Introduction to Deep Learning (2018)](https://www.youtube.com/watch?v=JN6H4rQvwgY&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=61&pp=iAQB) |
| 61 | [Sequence Modeling with Neural Networks](https://www.youtube.com/watch?v=CznICCPa63Q&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=62&pp=iAQB) |
| 62 | [Convolutional Neural Networks](https://www.youtube.com/watch?v=NVH8EYPHi30&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=63&pp=iAQB) |
| 63 | [Deep Generative Modeling](https://www.youtube.com/watch?v=JVb54xhEw6Y&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=64&pp=iAQB) |
| 64 | [Deep Reinforcement Learning](https://www.youtube.com/watch?v=s5qqjyGiBdc&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=65&pp=iAQB) |
| 65 | [Deep Learning Limitations and New Frontiers](https://www.youtube.com/watch?v=l_yWLAQg7LU&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=66&pp=iAQB) |
| 66 | [Issues in Image Classification](https://www.youtube.com/watch?v=QYwESy6isuc&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=67&pp=iAQB) |
| 67 | [Faster ML Development with TensorFlow](https://www.youtube.com/watch?v=FkHWKq86tSw&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=68&pp=iAQB) |
| 68 | [Deep Learning – A Personal Perspective](https://www.youtube.com/watch?v=Z7YMDwzUTds&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=69&pp=iAQB) |
| 69 | [Beyond Deep Learning: Learning and Reasoning](https://www.youtube.com/watch?v=mNqVGB2HkXg&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=70&pp=iAQB) |
| 70 | [Computer Vision Meets Social Networks](https://www.youtube.com/watch?v=aFEnWHxUd7s&list=PLtBw6njQRU-rwp5__7C0oIVt26ZgjG9NI&index=71&pp=iAQB) |

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| Neural Networks | |
| **SOURCE: 01** | **Neural Networks** | |
| 01 | [Introduction to Neural Networks](https://www.youtube.com/watch?v=k99BFrY0QNk&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=1&pp=iAQB) | |
| 02 | [Biological and Artificial Neural Network | Basic Concepts](https://www.youtube.com/watch?v=0aDq6ax6kGQ&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=2&pp=iAQB) | |
| 03 | [Important Terms and Parameters Associated with Neural Networks](https://www.youtube.com/watch?v=7rmhqqDskw4&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=3&pp=iAQB) | |
| 04 | [Types of Activation Functions Used in Neural Networks | Basic Concepts](https://www.youtube.com/watch?v=q-MdfWlcC8g&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=4&pp=iAQB) | |
| 05 | [Learning in Neural Networks and Supervised Learning | Basic Concepts](https://www.youtube.com/watch?v=zxxzWmb2wRI&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=5&pp=iAQB) | |
| 06 | [Learning in Neural Networks and Unsupervised and Reinforcement Learning](https://www.youtube.com/watch?v=C9HeBDuaC9U&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=6&pp=iAQB) | |
| 07 | [Biological vs Artificial Neural Networks | A Comparison](https://www.youtube.com/watch?v=Mu1o4hT6G1E&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=7&pp=iAQB) | |
| 08 | [Learning Rules | Error Correction Learning | Basic Concepts](https://www.youtube.com/watch?v=GR386H63TQI&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=8&pp=iAQB) | |
| 09 | [Learning Rules | Memory Based Learning | Basic Concepts](https://www.youtube.com/watch?v=lRgPi63KzsY&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=9&pp=iAQB) | |
| 10 | [Learning Rules | Hebbian Learning | Basic Concepts](https://www.youtube.com/watch?v=tsnpwHscJvQ&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=10&pp=iAQB) | |
| 11 | [Learning Rules | Competitive Learning | Basic Concepts](https://www.youtube.com/watch?v=_iRXBIqMl9I&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=11&pp=iAQB) | |
| 12 | [Learning Rules | Boltzmann Learning | Basic Concepts](https://www.youtube.com/watch?v=x9Z1akNskxA&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=12&pp=iAQB) | |
| 13 | [McCulloch – Pitts Neuron Model | M-P Model | Basic Concept](https://www.youtube.com/watch?v=vsV95EDHyu8&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=13&pp=iAQB) | |
| 14 | [Perceptron Neural Network | Basic Concepts](https://www.youtube.com/watch?v=O3u-VMqBgto&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=14&pp=iAQB) | |
| 15 | [Adaptive Linear Neuron | Adaline | Basic Concepts](https://www.youtube.com/watch?v=-daqvXBKT0k&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=15&pp=iAQB) | |
| 16 | [Multiple Adaptive Linear Neuron | Madaline | Basic Concepts](https://www.youtube.com/watch?v=--B_EM8Yu2I&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=16&pp=iAQB) | |
| 17 | [Back Propagation Neural Network | Basic Concepts](https://www.youtube.com/watch?v=tQTThWbx1Cg&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=17&pp=iAQB) | |
| 18 | [Linear Separability in Neural Network | Basic Concepts](https://www.youtube.com/watch?v=Nj5d2SnDppU&list=PLVsrfTSlZ_42TbmQUmidUJaiRF8D34zQL&index=18&pp=iAQB) | |