

The Periodic Table of Deep Learning

COMPANY NAME

3. Problems

P01 ↓ Rul Rules learning W,N	P02 = Clu Clustering V,A,W,N	P03 = Cg Content generation V,A,W,N	P04 ↑ For Forecasting N	P05 = Ran Ranking V,A,W,N	P06 ↑ Rec Recommendation V,A,W,N	M07 ↓ Reg Regression V,A,W,N
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4. Learning

L01 = Acl Active Learning V,A,W,N	L02 ↑ Clf Classification V,A,W,N	L03 = Enl Ensemble Learning V,A,W,N	L04 ↑ Fl Federated Learning V,A,W,N	L05 ↑ Col Contrastive Learning V,A,W,N	L06 ↑ Gm Generative Modeling V,A,W,N	L07 = Mli Multi-Instance Learning V,A,W,N	L08 = Ret Retrieval V,A,W,N	L09 = Onl Online Learning V,A,W,N	L10 ↑ Rl Reinforcement Learning V,A,W,N	L11 ↑ Ses Self-supervised Learning V,A,W,N	L12 ↑ Ss Semi-Supervised Learning V,A,W,N	L13 ↑ Su Supervised Learning V,A,W,N	L14 ↑ Trl Transfer Learning V,A,W,N	L15 ↑ Un Unsupervised Learning V,A,W,N
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ID → L01 ↑ ← Popularity
← Symbol
Name → Interaction-Based Networks
Data Types → V,A,W,N

■ Problems ■ Network ■ Applications ■ Library
■ Learning ■ Model ■ Deployment ■ Metric

5. Network

6. Model

N01 ↑ An Adversarial Networks V,A,W,N	N02 ↑ Am Attention Models V,A,W,N	N03 ↓ Bpn Biological Networks V,A,W,N	N04 ↑ Cnn CNN Architectures V	N05 ↓ Dac Deep Autoencoders V,A,W,N	N06 = Eim Efficient Inference Methods V,A,W,N	N07 = Etm Efficient Training Methods V,A,W,N	N08 = Ea Embedding Approaches V,A,W,N	N09 ↓ Ibn Interaction Networks W	N10 = Man Memory-Augmented Net W	N11 = Rn Recurrent Networks V,A,W	N12 = Rn Supervised Deep Networks V,A,W,N	N13 ↑ Sn Siamese networks V,A,W	N14 ↑ Tf Transformers V,A,W	N15 = Prp Proximal Policy Opt V,N	N16 ↑ Dqn DQN V,N	N17 ↑ Lst LSTM V,A,W
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1. Deployment

D03 ↓ Da Desktop app V,A,W,N	D04 ↑ Eb Embedded V,A,W,N	D05 ↑ lot IoT V,A,W,N	D06 ↑ Jn Jetson Nano V,A,W,N	D07 ↑ Mo Mobile V,A,W,N	D08 = St Serverless architecture V,A,W,N
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2. Applications

A03 = Asp Audio and Speech Processing A	A04 ↑ Bpa Body Pose Analysis V	A05 ↑ Cb Chatbot A,W	A06 ↓ Den Denoising A	A07 = Dbl Dialog-Based Learning A,W	A08 ↑ Is Image Segmentation V	A09 = Mc Motor Control N	A10 ↑ Mum Music Modeling A	A11 = Ner Named entity recognition W	A12 = Na Network Analysis W,N	A13 ↑ Odt Object Detection V	A14 ↑ Or Object Recognition V	A15 ↑ Ps Privacy and Security V,A,W,N	A16 = Pg Program Generation W,N	A17 ↑ Rid Re-identification V	A18 ↑ Rb Robotics V,A,N	A19 ↑ Sp Signal Processing V,A,N	A20 = Sr Speech Recognition A	A21 ↑ Tsa Time Series Analysis N	A22 ↑ Tmv Tracking and Motion in Video V	A23 ↑ Van Video Analysis V	A24 = Vqa Visual Question Answering V	A25 = Vsa Visual Scene Analysis V	A26 ↑ Wa Web Application W,N	A27 ↑ Qua Quality Assessment V
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7. Library

I01 ↓ Caf Caffe V,A,W,N	I02 = Dg deepgraph V,A,W,N	I03 = Gen gensim W	I04 = Hor horovod V,A,W,N	I05 ↑ Ke keras V,A,W,N	I06 = Lib librosa A	I07 = Lb libshorttext W	I08 = Nlt NLTK W	I09 ↑ Np numpy V,A,W,N	I10 = Op opencv V	I11 ↑ Pd Pandas W,N	I12 = Pil PIL V	I13 ↑ Pyt pytorch V,A,W,N	I14 = Sci scikit-image V	I15 = Skl scikit-learn A,W,N	I16 = Te Tensorflow V,A,W,N
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8. Metric

T01 = Bl BLEU W	T02 = Blr BLEURT W	T03 ↑ Ac Accuracy V,A,W,N	T04 = Auc Area under Curve V,A,W,N	T05 = Ap Average precision V,A,W,N	T06 = Ca Classification Accuracy V,A,W,N	T07 = Cm Confusion Matrix V,A,W,N	T08 = F1 F1 Score V,A,W,N	T09 ↑ Iou Intersection Over Union V	T10 ↑ LI Logarithmic Loss V,A,W,N	T11 = Mae Mean Absolute Error V,A,W,N	T12 ↑ Msq Mean Squared Error V,A,W,N	T13 = Pr Precision V,A,W,N	T14 = Prk Precision @K V,A,W,N	T15 = Re Recall V,A,W,N	T16 = Roc Receiver Operating Characteristics V,A,W,N
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Get Started

Learn More about the Tool or Use our [Step-by-step Guide](#)

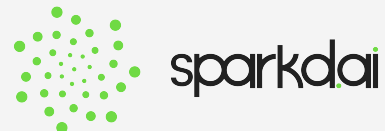
STEP 1: Define the Input

STEP 2: Deployment & Application

STEP 3: Identify Problems

STEP 4: Select Optimal Combinations

STEP 5: Control & Monitor Project



How to use this tool.
The Periodic table of Deep Learning is a tool specifically designed to support teams pursuing deep learning projects and initiatives.

By completing and referring to The Periodic Table step-by-step guide alongside this document you will be able to flesh out the information required to create an actionable plan for your deep learning project.

[.click here](#) to learn more about each section of the table

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