Data Science/Machine Learning/Deep Learning

Essential Topics of Math to learn #DataScience and #MachineLearning:

Breakdown of Importance

Linear Algebra (35%)

Statistics & Probability (25%)

Calculus (15%)

Optimization & Algorithms (15%)

Other (10%)

➤ Linear Algebra

Matrices, Vectors, Eigenvalues/Eigenvectors, Linear Transformations & Equations

https://lnkd.in/gW6_F_3

➤ Inferential Statistics

Sampling Distribution, Central Limit Theorem, Hypothesis Testing, Types of Errors, ANOVA, Chi-Square, T-Test

https://lnkd.in/gbh3aRj

➤ Probability Theory

Random Variables, Types of Distributions, Sampling, Conf. Intervals, Z Scores

https://lnkd.in/gJ442c8

➤ Basic Calculus

https://lnkd.in/gEUFDaS

➤ Linear Programming

Formulating a Real Problem to a Mathematical Model

https://lnkd.in/gGBpjaK

➤ Optimization

Gradient Algorithms & Objective Functions

https://lnkd.in/g_e9sJu

➤ Graph Theory

Trees, Nodes, Edges

https://lnkd.in/gYUgBhA

➤ Data Structures

https://lnkd.in/gT_8_Fc

Presentation about Machine Learning

Slides by Jason Mayes - https://lnkd.in/gNFyV5u

Machine Learning Glossary

Google machine learning in handy - https://lnkd.in/gNiE9JT

List of 8 Essential Algorithms for Machine Learning:

1. Logistic Regression

https://lnkd.in/gJ2BwhD

2. Linear Regression

https://lnkd.in/gdZDbT5

3. Decision Trees

https://lnkd.in/gwadA-p

4. Random Forests

https://lnkd.in/gRYHcvt

5. Neural Networks

https://lnkd.in/gZQhWyv

6. Bayesian Techniques

https://lnkd.in/gY3qVYP

7. Support Vector Machines

https://lnkd.in/gWJKRyn

8. Gradient Boosting Machine

https://lnkd.in/gv85yDV

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9 Must-Watch Deep Learning Videos to get INSPIRED by:

1. DeepMind's AI Creates Images From Your Sentence

https://lnkd.in/g-kHVh9

2. DeepMind's AI Learns Locomotion From Scratch

https://lnkd.in/gXscmM8

3. DeepMind's AI Beats AlphaGo

https://lnkd.in/g8JxYgJ

4. Bot Beats DOTA World Champion

https://lnkd.in/gHDzqQD

5. NVIDIA's AI Dreams Up Imaginary Celebrities

https://lnkd.in/ghqYEUu

6. Algorithmic Beautification of Selfies

https://lnkd.in/gUhS2bK

7. Deep Neural Network Learns Van Gogh's Art

https://lnkd.in/gbr_F-2

8. AI Creates Facial Animation From Audio

https://lnkd.in/gWwV3jC

9. Image Synthesis From Text w/ Deep Learning

https://lnkd.in/gRG4b2K