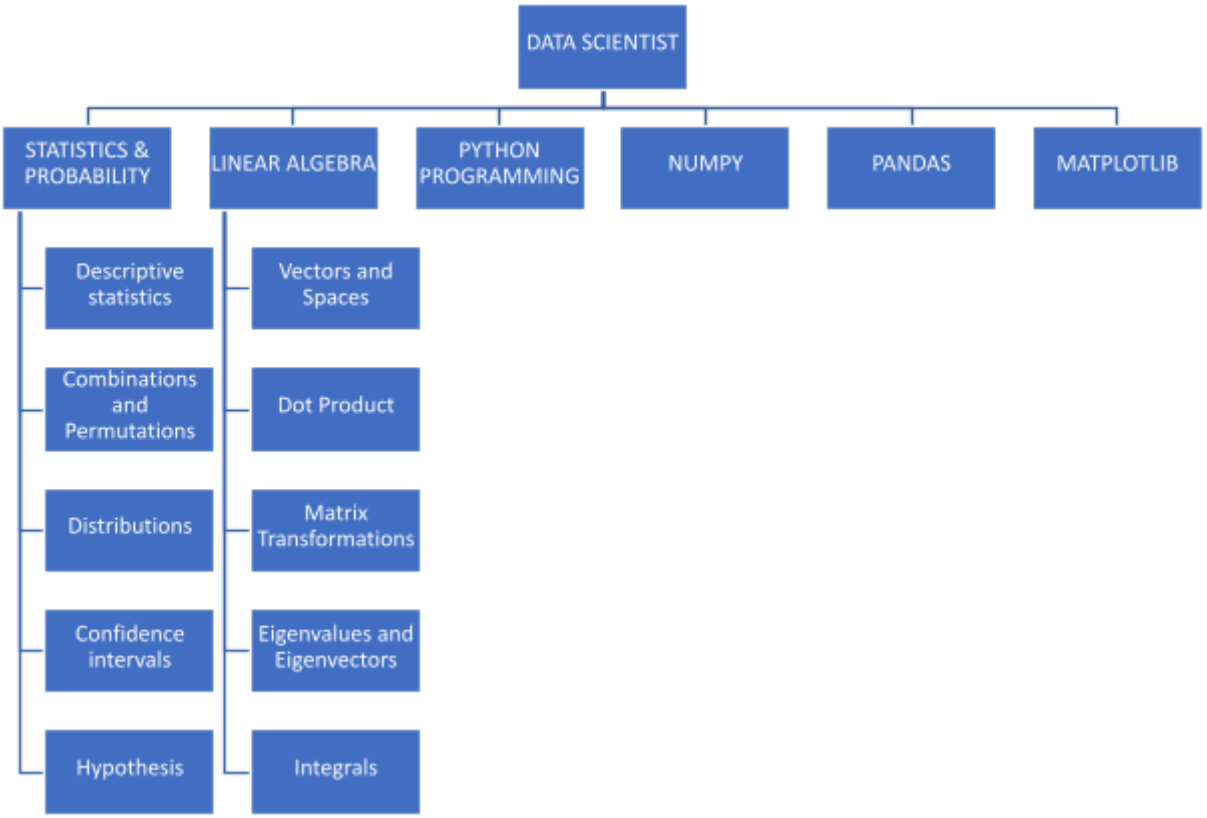


DATA SCIENTIST

STATISTICS & PROBABILITY

1.Descriptive statistics

- descriptive statistics-Intro to Descriptive Statistics. Descriptive Statistical Analysis helps… | by Niklas Donges | Towards Data Science
- Probability-Theoretical probability | Statistics and Probability (video) | Khan Academy
- Sample spaces- Probability with counting outcomes (video) | Khan Academy

- Set operations- Intersection and union of sets (video) | Khan Academy
- Addition rule- Probability with Venn diagrams (video) | Khan Academy
- Multiplications rule for independent events- Sample spaces for compound events (video) | Khan Academy
- Multiplications rule for dependent events- Dependent probability introduction (video) | Khan Academy
- Conditional probability and independence- Calculating conditional probability (video) | Khan Academy

2. Combinations and Permutations

- Counting principles and factorial- Count outcomes using tree diagram (video) | Khan Academy
- Permutations- Permutation formula (video) | Permutations | Khan Academy
- Combinations- Intro to combinations (video) | Combinations | Khan Academy

3.Distributions

- Normal distributions and the empirical rule-Qualitative sense of normal distributions (video) | Khan Academy
- Introduction to sampling distributions- Introduction to sampling distributions (video) | Khan Academy
- Sampling distributions of a sample propagation- Sampling distribution of sample proportion part 1 (video) | Khan Academy
- sampling distributions of a sample mean- Inferring population mean from sample mean (video) | Khan Academy

4.Confidence intervals

- confidence intervals-Confidence intervals and margin of error (video) | Khan Academy
- Estimating sample proportions-Confidence interval example (video) | Khan Academy
- Estimating sample means-Introduction to t statistics (video) | Khan Academy

5.Hypothesis

- Hypothesis Testing-Simple hypothesis testing (video) | Khan Academy
- Error probabilities and power-Introduction to Type I and Type II errors (video) | Khan Academy
- Tests about a population proportion-Constructing hypotheses for a significance test about a proportion (video) | Khan Academy
- Tests about a population mean-Writing hypotheses for a significance test about a mean (video) | Khan Academy

LINEAR ALGEBRA

1.Vectors and Spaces

- Vectors-Vector intro for linear algebra (video) | Khan Academy
- Linear Combinations and Spans-Linear combinations and span (video) | Khan Academy
- Subspaces and the basis for a subspace-Linear subspaces (video) | Khan Academy

2. Dot Product

- Vector dot and cross products-Vector dot product and vector length (video) | Khan Academy

3. Matrix Transformations

- Functions and Linear Transformations-A more formal understanding of functions (video) | Khan Academy
- Transformations and Matrix Multiplications-Compositions of linear transformations 1 (video) | Khan Academy
- Inverse Functions and Transformations-Introduction to the inverse of a function (video) | Khan Academy
- Inverses and Determinants-Deriving a method for determining inverses (video) | Khan Academy

- Transpose of a Matrix-Transpose of a matrix (video) | Khan Academy

4. Eigenvalues and Eigenvectors

- Eigenvalues and Eigenvectors-Eigenvector and Eigenvalue (mathsisfun.com)

5. Integrals

- Approximation with Riemann Sums-Riemann approximation introduction (video) | Khan Academy
- Definite Integrals with Riemann Sums-Definite integral as the limit of a Riemann sum (video) | Khan Academy
- The Fundamental Theorem of Calculus and Accumulation Functions-The fundamental theorem of calculus and accumulation functions (video) | Khan Academy
- Properties of Definite Integrals-Negative definite integrals (video) | Khan Academy
- The Fundamental Theorem of Calculus and Definite Integrals-The fundamental theorem of calculus and definite integrals (video) | Khan Academy
- Reverse Power Rule-Reverse power rule (video) | Integrals | Khan Academy
- Indefinite Integrals of Common Functions-Indefinite integral of 1/x (antiderivative of 1/x) (video) | Khan Academy
- Definite Integrals of Common Functions-Definite integrals: reverse power rule (video) | Khan Academy

PYTHON PROGRAMMING

Python-Roadmap to DevOps (youtube.com)

NUMPY

- Numpy-Your fav creators are loving the #motoG34 5G. Grab it for ₹9,999* starting 17th Jan on @flipkart! (youtube.com)

PANDAS

- Pandas-Pandas & Python for Data Analysis by Example – Full Course for Beginners (youtube.com)

MATPLOTLIB

- Matplotlib-Matplotlib Crash Course (youtube.com)