

AI ALIGNMENT COHORT RESOURCES

Pre-reads for 7/15 Session:

Linear Algebra

1. Linear transformations - what they are, and why they are important:
[▶ Linear transformations and matrices | Chapter 3, Essence of linear algebra](#)
2. How matrix multiplication works:
[Matrix Multiplication](#)
[▶ Matrix multiplication as composition | Chapter 4, Essence of linear algebra](#)
3. [How to Understand Basis \(Linear Algebra\) | by Mike Beneschan](#)
4. Basic matrix properties: rank, trace, determinant, transpose
[Rank, basis, dimension](#)
[Trace of a matrix](#)
[▶ The determinant | Chapter 6, Essence of linear algebra](#)
5. Bases, and basis transformations:
[▶ Change of basis | Chapter 13, Essence of linear algebra](#)
6. Eigenvalues and eigenvectors:
[▶ Eigenvectors and eigenvalues | Chapter 14, Essence of linear algebra](#)
7. Different types of matrices, and their significance (e.g. symmetric, orthogonal, identity, rotation matrices) medium
[Matrix Types. Square, Triangle, Diagonal, Identity... | by jun94 | jun-devpBlog | Medium](#)

Information Theory

1. [Entropy in Machine Learning: Definition, Examples and Uses](#)
2. [Entropy; A method for Data Science & Machine Learning | by GOKE ADEKUNLE; #Wolfwords](#)
3. [Basics of Entropy](#)
4. [Understanding KL Divergence. A guide to the math, intuition, and... | by Aparna Dhinakaran | Towards Data Science](#)
5. [▶ The KL Divergence : Data Science Basics](#)
6. [Elements of Information Theory \(Wiley Series in Telecommunications and Signal Processing\) \(Hardcover\)](#)