

# **AI 1 Training**



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# 1. Linear Systems



## 2. Matrices





### **3. Gaussian Elimination**



## 4. Vector



## 5. Vector Space



## 6. Linear Transformation





## 7. Introduction to SVMs



## 8. Basis



## 9. Eigenvalues and Eigenvectors



## 10. Limit





## 11. Derivative



## 12. Partial Derivative



## 13. Gradient



## 14. Backpropagation





## 15. Newton, Hessian Method



## 16. Taylor Series, Taylor Theorem



## 17. Linearization



## 18. Optimization





## 19. Probability



## 20. Probability Distributions



## 21. Sample



## 22. Estimating





## 23. Hypothesis Testing