

## **Phase 1: Programming & Data Fundamentals**

- "Python Crash Course" by Eric Matthes
- "Python for Data Analysis" by Wes McKinney

## **Phase 2: Mathematics Foundations**

- "Mathematics for Machine Learning" by Deisenroth, Faisal, and Ong
- "Think Stats" by Allen B. Downey

## **Phase 3: Machine Learning Basics**

- "Introduction to Statistical Learning" by James, Witten, Hastie, and Tibshirani
- "Hands-On Machine Learning with Scikit-Learn and TensorFlow" by Aurelien Geron

## **Phase 4: Deep Learning**

- "Deep Learning with Python" by Francois Chollet
- "Deep Learning" by Goodfellow, Bengio, and Courville

## **Phase 5: Specialized Areas**

- "Natural Language Processing with Python" by Bird, Klein, and Loper
- "Deep Learning for Computer Vision" by Rajalingappaa Shanmugamani
- "Reinforcement Learning: An Introduction" by Sutton and Barto

## **Advanced Topics & Applications**

- "Designing Data-Intensive Applications" by Martin Kleppmann
- "Building Machine Learning Powered Applications" by Emmanuel Ameisen