

ZERO TO HERO: FULL GUIDE TO MACHINE LEARNING

(according to: ML Engineer @ Amazon, ML Engineer @ DoorDash, Data Science @ NVIDIA)

Assumptions:

- You know Python and took highschool math
- That's it.

1. Learn mathematics

- ☐ Calculus I, II
- ☐ Linear Algebra (understand dot product, matrix manipulations)
- ☐ Fundamentals of Probability Theory

2. Learn the **ML Developer Stack**

- ☐ Jupyter notebooks
- ☐ Pandas
- ☐ Numpy
- ☐ MATPLOTLIB
- ☐ Scikit-learn
- ☐ TensorFlow
- ☐ PyTorch

3. Watch the following courses:

- ☐ Machine Learning Specialization by Andrew Ng
- ☐ Neural Networks: Zero to Hero by Andrej Karpathy
- ☐ Deep Learning Specialization by Andrew Ng
- ☐ NLP Course via HuggingFace

4. Build your portfolio

- ☐ Work on Kaggle challenges
- ☐ Reimplement a research paper - then recreate results
- ☐ Publish a paper @ top conf.
- ☐ Write blog posts
 - i. Projects, papers read, summaries of papers, etc.
- ☐ Contribute to open source
- ☐ Build personal projects involving ML
- ☐ **Teaching, blog posts/YouTube** (heavily recommended by everyone)