Deep Learning

Big Data & Machine Learning Bootcamp - Keep Coding



Outline

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1. Intro

Welcome to Deep Learning!

- 1. From zero to hero: We'll cover the most fundamental ideas and some of the most complex applications in Deep Learning
- 2. Let's make this module dynamic and interactive. Curiosity ON, please!
- 3. There will be **8 sessions each one of 4 hours** (short break of 15 to 20 minutes)



2. About - Andres Diaz-Pinto

Passionate about machine learning
Finished my PhD in Computer Vision & Deep Learning in 2019
Currently a Research Fellow at King's College London
LinkedIn: https://www.linkedin.com/in/diazandr3s/

Areas of interests: Machine Learning, Deep Learning, Computer Vision and Image Analysis



3. Module Content

In this module, we'll cover the most important and topics on neural and deep neural networks.

- Backpropagation
- Deep learning frameworks (Tensorflow, Keras)
- Regularization and optimization
- Convolutional Neural networks (CNN)
- Transfer learning
- How to structure a machine learning project
- Sequence models



4. Schedule

Day of Week	Date	Event
Monday	13/12/2021	Session I
Tuesday	14/12/2021	Session II
Thursday	16/12/2021	Session III
Monday	10/1/2022	Session IV
Tuesday	11/1/2022	Session V
Thursday	13/1/2022	Session VI
Monday	17/1/2022	Session VII
Tuesday	18/1/2022	Session VIII
Sunday	30/1/2022	FINAL PROJECT



5. Tools

- GitLab: https://gitkc.cloud/keepcoding-bootcamps/full-stack-big-data-ai-y-ml-viii/deep-learning/de
- Python 3
- Jupyter notebook
- Google Colab https://colab.research.google.com/
- Deep Learning Specialization in Coursera https://www.coursera.org/specializations/deep-learning
- http://www.pyimagesearch.com
- Deep Learning book: https://www.deeplearningbook.org/



6. Evaluation

- Questions and active interaction during sessions
- Final project
- Final Mark: APTO / NO APTO

