## Building a Brain Tumor Detector using MRI Images

## **MLDawn**

- 1. Introduction
- 2. Step by step of Anaconda environment setup
- 3. Replicate my Environment on Your Machine
- 4. Finding a Kaggle Brain MRI Dataset and Importing Packages
- 5. Reading the Brain MRI images in Python
- 6. How to visualize our Brain MRI images
- 7. What is Pytorch's Abstract Dataset Class Overriding \_\_len\_\_ and \_\_getitem\_\_
- 8. Create CUSTOMIZED Pytorch Class for brain MRI images
- 9. Iterate through the MRI Dataset (Part-1) Using For Loop and Next(Iter) comman
- 10. Iterate through the MRI Dataset (Part-2) Using DataLoader
- 11. How to code a CNN using Pytorch
- 12. Convolutional layers and linear layers CRUSH input dimensionality Step-by-step
- 13. Inside convolutional layers and fully connected layers in Pytorch
- 14. Pytorch What is model.eval
- 15. Test a New-Born Convolutional Neural Network in Pytorch
- 16. Train a New-Born Convolutional Neural Network in Pytorch
- 17. Visualizing the Feature Maps in Convolutional Neural Networks (CNN)
- 18. Validation Set Approach To Solving Over-fitting Problem
- 19. How to Detect OVERFITTING in Machine Learning
- 20. Materials