Deep Learning

- 1. Deep Learning in General (Overview)
- 2. Demarcation to Artificial Intelligence and Machine Learning
- 3. Applications
- 4. Neural Networks
 - 4.1 Overview
 - 4.2 Different Types of Networks
 - 4.2.1 CNN
 - 4.2.2 RNN
 - 4.2.3 LSTM
 - 4.2.3 GRU
- 5. Object detection overview
 - 5.1 One stage object detection
 - 2D
 - o 3D
 - 5.2 two stage object detection
 - 2D
 - o 3D
 - 5.3 Performance metrics
 - 5.3.1 Mean average precision
- 6. Datasets overview
 - 6.1 Dense volume data or Dense 3D data
 - 6.1.1 CT scan
 - 6.2 Sparse 3D data
 - 6.2.1 LiDAR data
 - 6.2.2 RGBD data
- 7 Resolution of image (general introduction)
 - 7.1 Advantages and disadvantages of high resolution image
 - 7.2 Advantages and disadvantages of low resolution image

(According to the template from my college, the end of this section should be a summary of this section highlighting the issue that has not been adressed by the papers mentioned in this section)