# Week 1: Online Search + Topic Selection

## 1. Keywords Used for Internet Search

I spent a lot of time trying different search terms to find good papers and resources. Here's what I searched for:

#### Main keywords:

* Computer Vision
* Vision Transformer
* Medical imaging AI
* Chest X-ray classification
* Deep learning medical
* COVID-19 detection AI

#### More specific searches:

* "Vision Transformer medical images"
* "CNN vs transformer chest xray"
* "COVID-19 AI diagnosis 2023"
* "pytorch vision transformer tutorial"

I mostly used Google Scholar and ArXiv. Sometimes I had to try different combinations to find what I was looking for.

## 2. Research Papers (Minimum 5) - Published after 2022

1. https://www.nature.com/articles/s41467-023-41447-8

2. https://ieeexplore.ieee.org/document/10230456

3. https://www.sciencedirect.com/science/article/pii/S1361841523001056

4. https://arxiv.org/abs/2305.07027

5. https://link.springer.com/chapter/10.1007/978-3-031-16443-9\_55

6. https://www.frontiersin.org/articles/10.3389/fmed.2023.1143848

## 3. Presentations (Minimum 3)

1. http://cs231n.stanford.edu/slides/2023/lecture\_11.pdf

2. https://www.robots.ox.ac.uk/~vgg/practicals/cnn/index.html

3. https://pytorch.org/tutorials/\_downloads/transfer\_learning\_tutorial.pdf

## 4. YouTube Educational Videos (Minimum 3)

1. https://www.youtube.com/watch?v=TrdevFK\_am4

2. https://www.youtube.com/watch?v=KuXjwB4LzSA

3. https://www.youtube.com/watch?v=K0lWSB2QoIQ

## 5. GitHub Repositories and Online Code Resources

1. https://github.com/lucidrains/vit-pytorch

2. https://github.com/ieee8023/covid-chestxray-dataset

3. https://github.com/lukemelas/EfficientNet-PyTorch

4. https://github.com/pytorch/vision

5. https://github.com/huggingface/transformers