TGM Report 2 Implementation 1

Topic #3: VAE-based Medical Image Generator

Tasks

- 1. Implement solution 1 (put it on a GPU)
- 2. Extend Proof of Concept to a full prototype (like train on the a bigger training set, more epochs, try different parameters, ...)
- 3. Research variants of the VAE (e.g. β VAE, CVAE, ...)

Who did what

Felix:

• Creation of the boilerplate code for simple VAE in Pytorch (Proof of Concept)

Zixuan:

- Research about Pytorch/VAE
- Look into / investigate data package from MedMNIST

Ruben:

- Create Git
- Sample of VAE in tensorflow

Problems

1. Only CPU version was really slow

Solutions

1. Put the code on a GPU (local or Colab)

Outlook

- Work on tasks 1 to 3
- Get more deeply into the variants of VAE

Miscellaneous