Optimizing U-Net with TVM

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Task

- Medical image segmentation task
- Brain MRI based tumor segmentation
 - Data source: Kaggle, https://www.kaggle.com/mateuszbuda/lgg-mri-segmentation
- Model: (simple) U-Net

Training

- Pytorch & Keras version models were successfully trained
 - https://github.com/jonghyunlee1993/AIPlatformOptimization/tree/master/Pr oject_optimizing_U-net
- Now we try to optimize our U-Net model with TVM

Target HW	Frameworks	Performance Measurement					
		Before. Opt		After. Opt		Difference	
		Time	Accuracy	Time	Accuracy	Time	Accuracy
CPU	Pytorch						
	Keras						
	TF-Lite						
GPU	Pytorch						
	Keras						
	TF-Lite						
Raspberry Pi 3+	Pytorch						
	Keras						
	TF-Lite						