

Pull Requests

Created and Received

You Shuheng
07/06/2022

First Pull Request

KGAT: Ablation Study

- Three ablation study experiments in Section 4.4.3
- On TransR embedding component: remove difference loss

$$\mathcal{L}_{\text{KG}} = \sum_{(h,r,t,t') \in \mathcal{T}} -\ln \sigma(g(h,r,t') - g(h,r,t)), \quad (2)$$

- On the attention mechanism: use same attention for different triplets

$$\pi(h,r,t) = (\mathbf{W}_r \mathbf{e}_t)^\top \tanh((\mathbf{W}_r \mathbf{e}_h + \mathbf{e}_r)), \quad (4)$$

- On both

First Pull Request

KGAT: Ablation Study

- Loss of knowledge graph training decreases to a meaningless level
- More effective early training
- Final performance expected to be weaker

Second Pull Request

BerConvoNet: Add Parser

- Based on yoharol's repository
- Added parser support for hyper parameters

○○○

```
max_len = args.max_len
train_batch_size = args.batch_size
valid_batch_size = args.batch_size
epochs = args.epochs
learning_rate = args.learning_rate
dropout = args.dropout
```

Third Pull Request

BackgroundMatting: Multiple Backbone ResNet Options

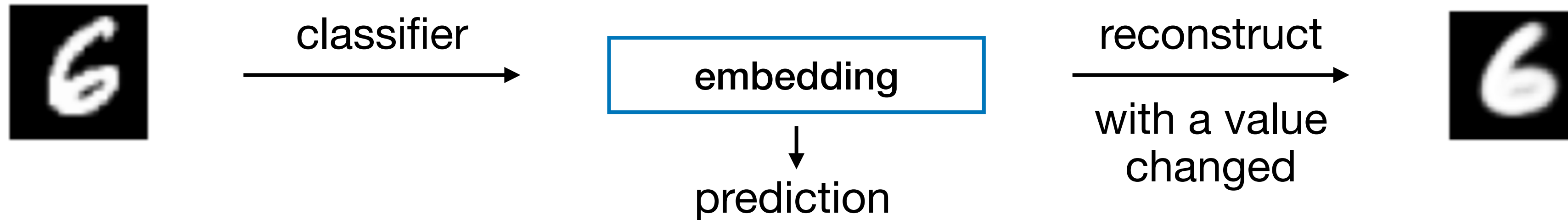
- Multiple variations for ResNets, but with similar architectures and behavior
- Create a dict, to look up ResNet structures

```
resnet_config = {  
    'resnet50': [3, 4, 6, 3],  
    'resnet101': [3, 4, 23, 3],  
    'resnet18': [2, 2, 2, 2],  
    'resnet34': [3, 4, 6, 3],  
    'resnet152': [3, 8, 36, 3],  
}
```

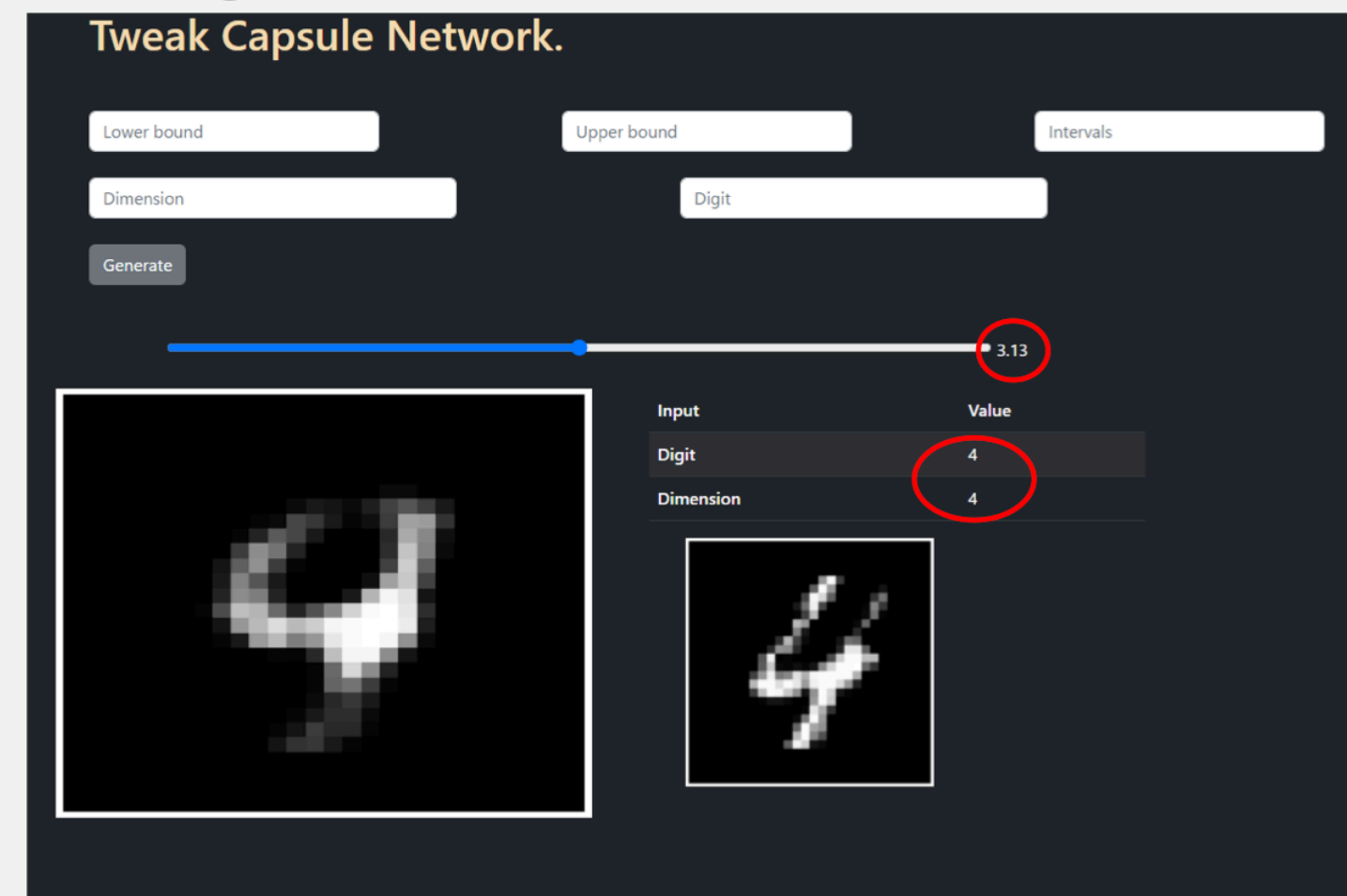
- Source for pre-trained models only provides ResNet50 and ResNet101

Pull Request I Received

Visualization for Classification Embeddings



- PR to media-comp/2022-CapsuleNetwork.
- **Implement a Flask app for vector tweaking visualization.**
 - User needs to provide 5 parameters.
 - The app will display warning messages if the input is not valid.
 - The display image will change with the moving slider bar.
 - The original figure is shown for comparison.



Thank you!