

i-TAP meeting

홍익대학교

노승문

2021. 5. 28

Cannot find a code for EED

master 1 branch 0 tags

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Code

egypstdj update file path compatibility / update dataset class name	4993089 on 15 Mar	9 commits
utils	correct wrong image ids	10 months ago
.gitignore	Initial commit	11 months ago
LICENSE	Initial commit	11 months ago
README.md	update publication, citation and contact; add note on pytorch version	3 months ago
concept.png	Initial commit	11 months ago
dataset.py	update file path compatibility / update dataset class name	2 months ago
loss.py	Initial commit	11 months ago
main.py	update file path compatibility / update dataset class name	2 months ago
metric.py	Initial commit	11 months ago
model.py	fix self class name	10 months ago
session.py	Initial commit	11 months ago

README.md

Team *skyb* solution for the AIM2020 mobile image signal processing challenge

Publication

PyNET-CA: Enhanced PyNET with Channel Attention for End-to-End Mobile Image Signal Processing

Byung-Hoon Kim, Joonyoung Song, Jong Chul Ye, JaeHyun Baek

ECCV 2020 Workshops - Advances in Image Manipulation (AIM)

About

Team <skyb> solution for the AIM2020 mobile image signal processing challenge

image-reconstruction signal-processing

raw-to-rgb eccv2020 aim2020

Readme

GPL-3.0 License

Languages

Python 100.0%

PyNet-CA code

Pretrained: 195.83MB

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1 branch
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Code

albert-no TMP: temporary commit		441ad81 6 days ago	11 commits
models/original	Original commit		15 months ago
raw_images	Original commit		15 months ago
results/full-resolution	Original commit		15 months ago
.gitignore	ADD: git ignore		6 days ago
LICENSE.md	Original commit		15 months ago
README.md	Google Drive quota		15 months ago
data_generator.py	TMP: temporary commit		6 days ago
dng_to_png.py	Original commit		15 months ago
evaluate_accuracy.py	Original commit		15 months ago
load_data.py	FIX: scipy outdated issues, float() tensor issues		6 days ago
model.py	Original commit		15 months ago
msssim.py	Original commit		15 months ago
patch_generator.json	TMP: temporary commit		6 days ago
test_model.py	Original commit		15 months ago
train_model.py	FIX: scipy outdated issues, float() tensor issues		6 days ago
utils.py	Original commit		15 months ago
vgg.py	Original commit		15 months ago

About

No description, website, or topics provided.

Readme

View license

Releases

No releases published
[Create a new release](#)

Packages

No packages published
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Contributors 2



Languages

Python 100.0%

Training

- train_model
 - Quad (not QxQ)
 - Parameters: TRAIN_SIZE 46839->800 (1.7%), etc
 - Epoch: 8, 8, 17, 17, 25, 50 (for levels 5 - 0)
 - Model size (level=0): 182MB
- Test
 - Reused the trained input (just sanity check)



Original



Quad



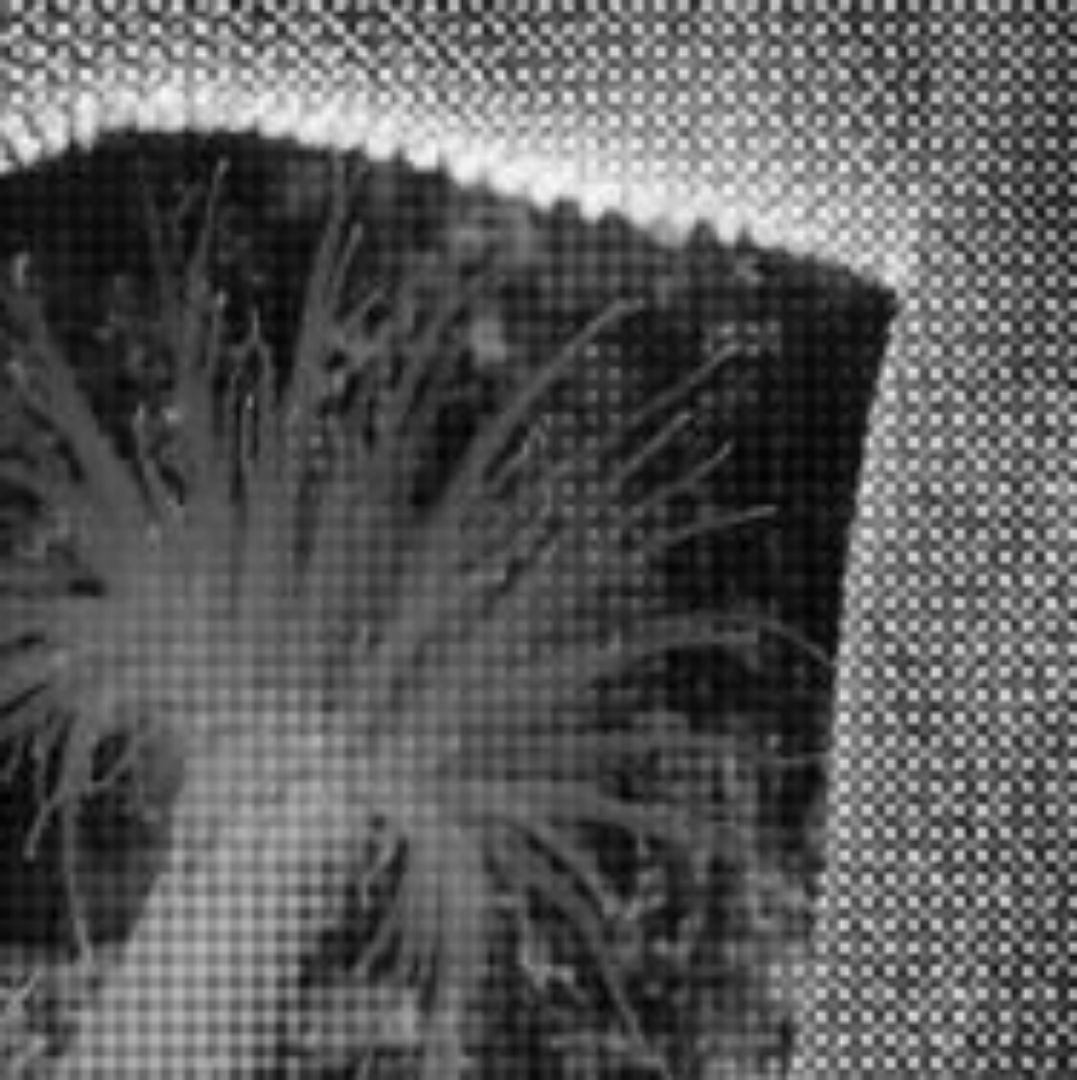
demosaiced



Original



Original



Quad



demosaiced



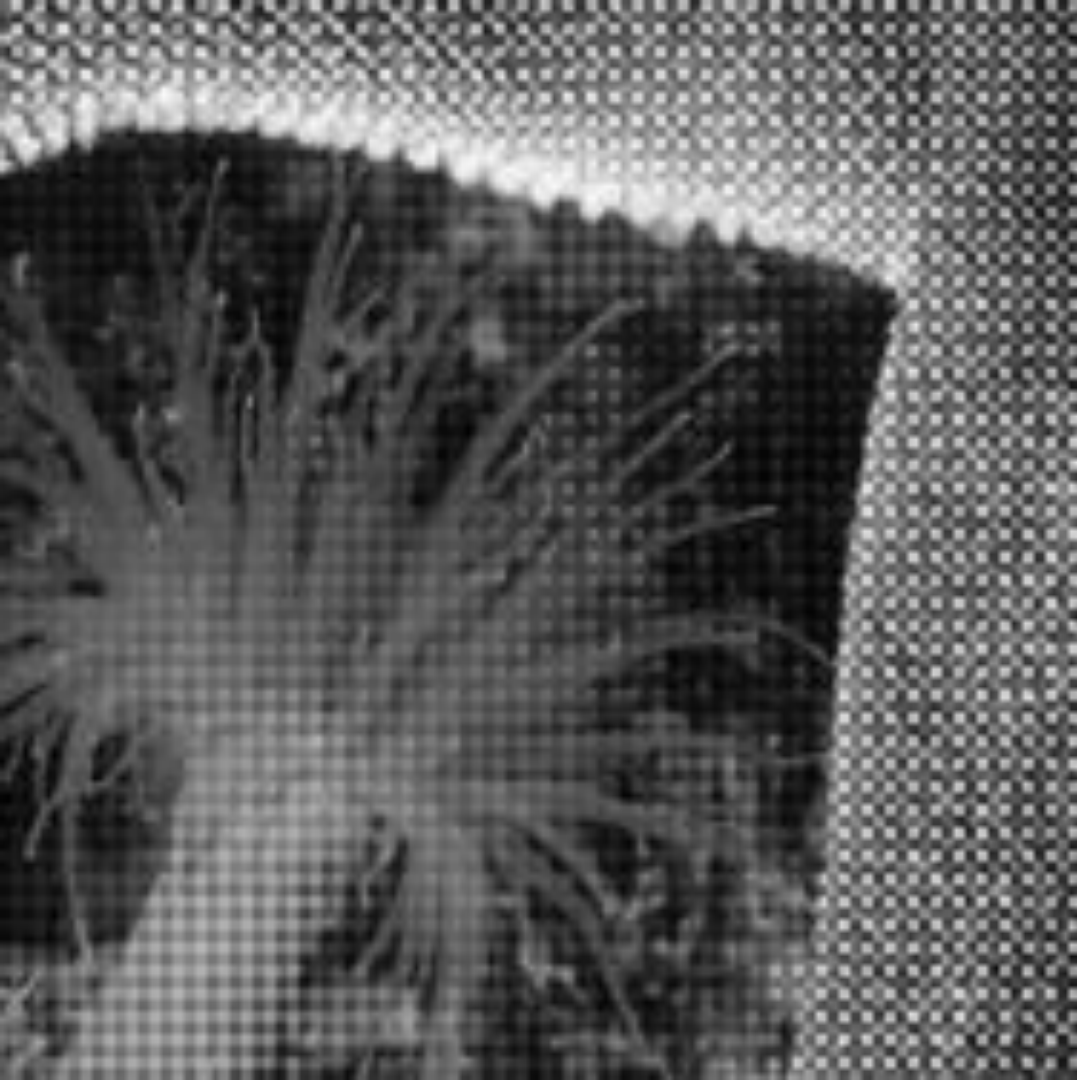
Original



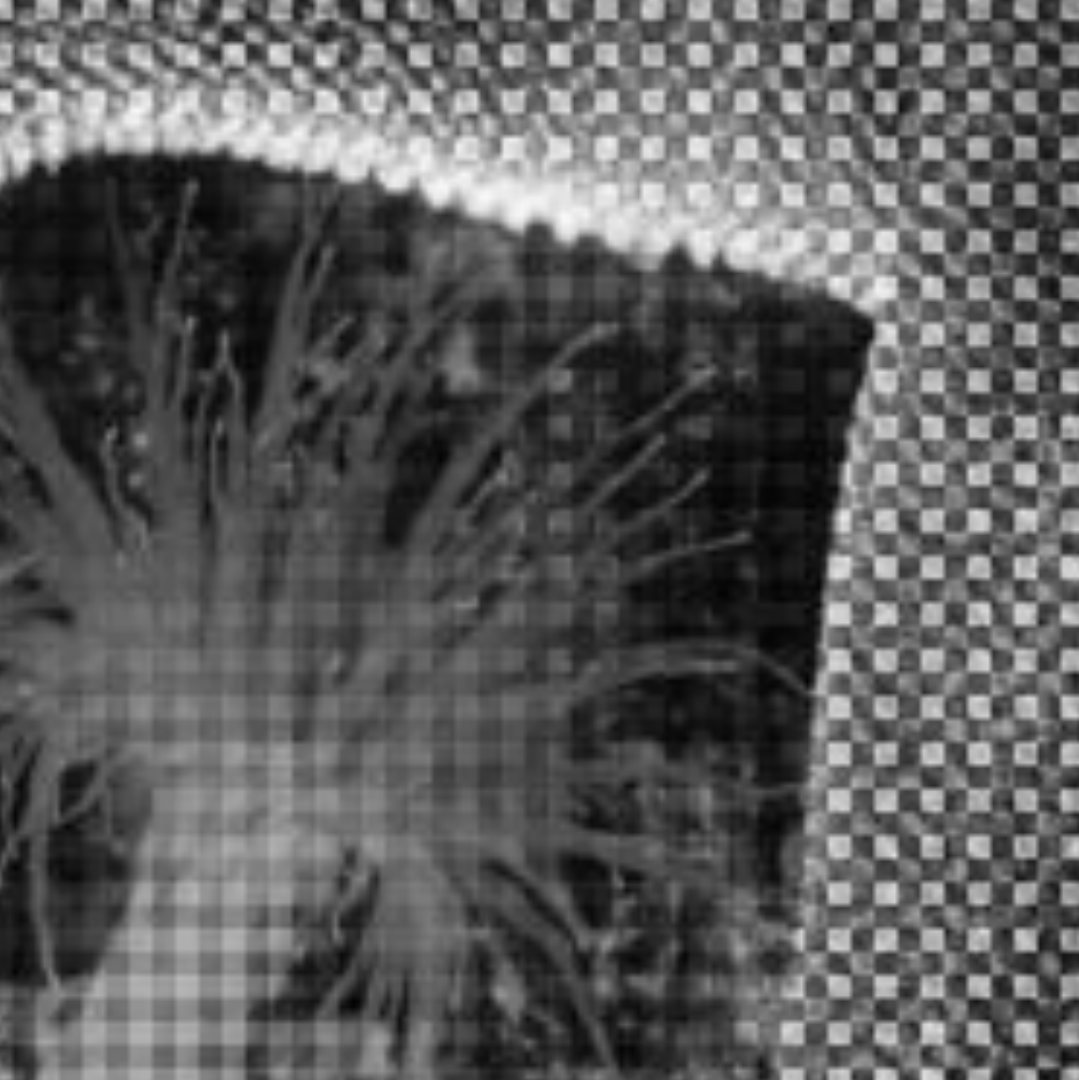
Quad



QxQ



Quad



QxQ

Concerns

- Training Data
 - Can we just apply cfa filters?
 - Exact meaning of bicubic downscaling
 - Way of downsampling? kernel?
 - Training data should be in original scale

Data access

- (NTIRE 2017) Low Res Images:
 - Train Data Track 1 bicubic downscaling x2 (LR images)
 - Train Data Track 2 unknown downgrading operators x2 (LR images)
 - Validation Data Track 1 bicubic downscaling x2 (LR images)
 - Validation Data Track 2 unknown downgrading operators x2 (LR images)
 - Train Data Track 1 bicubic downscaling x3 (LR images)
 - Train Data Track 2 unknown downgrading operators x3 (LR images)
 - Validation Data Track 1 bicubic downscaling x3 (LR images)
 - Validation Data Track 2 unknown downgrading operators x3 (LR images)
 - Train Data Track 1 bicubic downscaling x4 (LR images)
 - Train Data Track 2 unknown downgrading operators x4 (LR images)
 - Validation Data Track 1 bicubic downscaling x4 (LR images)
 - Validation Data Track 2 unknown downgrading operators x4 (LR images)
- (NTIRE 2018) Low Res Images:
 - Train Data Track 1 bicubic x8 (LR images)
 - Train Data Track 2 realistic mild x4 (LR images)
 - Train Data Track 3 realistic difficult x4 (LR images)
 - Train Data Track 4 realistic wild x4 (LR images)
 - Validation Data Track 1 bicubic x8 (LR images)
 - Validation Data Track 2 realistic mild x4 (LR images)
 - Validation Data Track 3 realistic difficult x4 (LR images)
 - Validation Data Track 4 realistic wild x4 (LR images)
- High Resolution Images:
 - Train Data (HR images)
 - Validation Data (HR images)

Questions?