

Project Checklist

Sum of points

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|----------------------|
| Problem Solved: 3pts |
| Model: 3pts |
| Dataset: 0pts |
| Training: 6pts |
| Tools: 2pts |
| |
| Total: 14pts |

Problem Solved

| Task | Points | Status | Type |
|--------------------|--------|--------|------------|
| Super-Resolution | 3pts | [x] | Mandatory |
| Additional Problem | 1pts | [] | Additional |

Model

| Task | Points | Status | Type |
|---|--------|--------|------------|
| Ready-Architecture Trained From Scratch | 1pts | [x] | Mandatory |
| Additional Models | 1/2pts | [2] | Additional |
| Non-Trivial solution | 1pts | [] | Additional |

Dataset

| Task | Points | Status | Type |
|-----------------------|--------|--------|------------|
| Minimal size: 200x200 | 0pts | [x] | Mandatory |
| At least 1k photos | 0pts | [x] | Mandatory |
| 10k photos | 1pts | [] | Additional |
| Own 500 photos | 1pts | [] | Additional |

Training

| Task | Points | Status | Type |
|----------------------------------|--------|--------|-----------|
| Correctly selected loss function | 0pts | [x] | Mandatory |
| Train, Val, Test | 0pts | [x] | Mandatory |

| Task | Points | Status | Type |
|--------------------------------------|--------|--------|------------|
| Metrics | 0pts | [x] | Mandatory |
| Hyperparameter Tuning | 1pts | [x] | Additional |
| Architecture Tuning | 1pts | [x] | Additional |
| Overfitting some examples from train | 1pts | [] | Additional |
| Data Augmentation | 1pts | [x] | Additional |
| Cross-Validation | 1pts | [x] | Additional |
| Distributed Learning | 1pts | [] | Additional |
| Federated Learning | 2pts | [] | Additional |
| Testing Few Optimizers | 1pts | [x] | Additional |
| Testing Few Loss Functions | 1pts | [x] | Additional |

Tools

| Task | Points | Status | Type |
|-------------------------------------|--------|--------|------------|
| Git | 0pts | [x] | Mandatory |
| MLflow, Tensorboard, Neptune, W&B | 1pts | [] | Additional |
| Run as Docker | 1pts | [x] | Additional |
| REST API or GUI (e.g., Gradio) | 1pts | [x] | Additional |
| DVC | 2pts | [] | Additional |
| Every other MLOps tool | 1pts | [] | Additional |
| Label Studio or other data labeling | 1pts | [] | Additional |

Sources

<https://medium.com/@zhuocen93/an-overview-of-espcn-an-efficient-sub-pixel-convolutional-neural-network-b76d0a6c875e>