

Modelli di Keras

| MobileNet | | | | |
|-----------|--------|----------------|--------|--------|
| Guess T1 | 2676 | Model Size | 16 MB | |
| Guess T5 | 3480 | | | |
| Total | 3923 | | | |
| TOP 1 | 68.21% | Expected TOP 1 | 70.40% | -2.19% |
| TOP 5 | 88.71% | Expected TOP 5 | 89.50% | -0.79% |

| Inception V3 | | | | |
|--------------|--------|----------------|--------|--------|
| Guess T1 | 2983 | Model Size | 92 MB | |
| Guess T5 | 3643 | | | |
| Total | 3923 | | | |
| TOP 1 | 76.04% | Expected TOP 1 | 77.90% | -1.86% |
| TOP 5 | 92.86% | Expected TOP 5 | 93.70% | -0.84% |

| ResNet152 V2 | | | | |
|--------------|--------|----------------|--------|--------|
| Guess T1 | 2699 | Model Size | 232 MB | |
| Guess T5 | 3496 | | | |
| Total | 3923 | | | |
| TOP 1 | 68.80% | Expected TOP 1 | 78.00% | -9.20% |
| TOP 5 | 89.12% | Expected TOP 5 | 94.21% | -5.09% |

| ResNet50 V2 | | | | |
|-------------|--------|----------------|--------|---------|
| Guess T1 | 2567 | Model Size | 98 MB | |
| Guess T5 | 3422 | | | |
| Total | 3923 | | | |
| TOP 1 | 65.43% | Expected TOP 1 | 76.01% | -10.58% |
| TOP 5 | 87.23% | Expected TOP 5 | 92.82% | -5.59% |

Modelli di PyTorch

| MobileNetV2 | | | | |
|-------------|--------|----------------|--------|--------|
| Guess T1 | 2809 | Model Size | 14 MB | |
| Guess T5 | 3524 | | | |
| Total | 3923 | | | |
| TOP 1 | 71.60% | Expected TOP 1 | 71.88% | -0.27% |
| TOP 5 | 89.83% | Expected TOP 5 | 90.27% | -0.44% |

| Inception V3 | | | | |
|--------------|--------|----------------|--------|--------|
| Guess T1 | 3015 | Model Size | 104 MB | |
| Guess T5 | 3651 | | | |
| Total | 3923 | | | |
| TOP 1 | 76.85% | Expected TOP 1 | 77.29% | -0.44% |
| TOP 5 | 93.07% | Expected TOP 5 | 93.45% | -0.38% |

| ResNet152 | | | | |
|-----------|--------|----------------|--------|--------|
| Guess T1 | 3001 | Model Size | 231 MB | |
| Guess T5 | 3678 | | | |
| Total | 3923 | | | |
| TOP 1 | 76.50% | Expected TOP 1 | 78.31% | -1.81% |
| TOP 5 | 93.75% | Expected TOP 5 | 94.05% | -0.29% |

| AlexNet | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2209 | Model Size | 234 MB | |
| Guess T5 | 3099 | | | |
| Total | 3923 | | | |
| TOP 1 | 56.31% | Expected TOP 1 | 56.52% | -0.21% |
| TOP 5 | 79.00% | Expected TOP 5 | 79.07% | -0.07% |

Keras VS PyTorch

| Diff * | Winner |
|--------|---------|
| -3.39% | PyTorch |
| -1.12% | PyTorch |

| Diff | Winner |
|--------|---------|
| -0.82% | PyTorch |
| -0.20% | PyTorch |

| Diff * | Winner |
|--------|---------|
| -7.70% | PyTorch |
| -4.64% | PyTorch |

| ResNet50 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2661 | Model Size | 98 MB | |
| Guess T5 | 3466 | | | |
| Total | 3923 | | | |
| TOP 1 | 67.83% | Expected TOP 1 | 74.90% | -7.07% |
| TOP 5 | 88.35% | Expected TOP 5 | 91.20% | -2.85% |

| VGG16 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2502 | Model Size | 528 MB | |
| Guess T5 | 3369 | | | |
| Total | 3923 | | | |
| TOP 1 | 63.78% | Expected TOP 1 | 71.30% | -7.52% |
| TOP 5 | 85.88% | Expected TOP 5 | 90.01% | -4.13% |

| VGG19 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2516 | Model Size | 549 MB | |
| Guess T5 | 3365 | | | |
| Total | 3923 | | | |
| TOP 1 | 64.13% | Expected TOP 1 | 71.30% | -7.17% |
| TOP 5 | 85.78% | Expected TOP 5 | 90.00% | -4.22% |

| ResNet50 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2970 | Model Size | 98 MB | |
| Guess T5 | 3650 | | | |
| Total | 3923 | | | |
| TOP 1 | 75.71% | Expected TOP 1 | 76.13% | -0.42% |
| TOP 5 | 93.04% | Expected TOP 5 | 92.86% | 0.18% |

| VGG16 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2762 | Model Size | 528 MB | |
| Guess T5 | 3547 | | | |
| Total | 3923 | | | |
| TOP 1 | 70.41% | Expected TOP 1 | 71.59% | -1.19% |
| TOP 5 | 90.42% | Expected TOP 5 | 90.38% | 0.03% |

| VGG19 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2802 | Model Size | 549 MB | |
| Guess T5 | 3553 | | | |
| Total | 3923 | | | |
| TOP 1 | 71.42% | Expected TOP 1 | 72.38% | -0.95% |
| TOP 5 | 90.57% | Expected TOP 5 | 90.88% | -0.31% |

| SqueezeNet 1.1 | | | | |
|----------------|--------|----------------|--------|-------|
| Guess T1 | 2286 | Model Size | 5 MB | |
| Guess T5 | 3173 | | | |
| Total | 3923 | | | |
| TOP 1 | 58.27% | Expected TOP 1 | 58.18% | 0.09% |
| TOP 5 | 80.88% | Expected TOP 5 | 80.62% | 0.26% |

| VGG19 BN | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 2877 | Model Size | 549 MB | |
| Guess T5 | 3599 | | | |
| Total | 3923 | | | |
| TOP 1 | 73.34% | Expected TOP 1 | 74.22% | -0.88% |
| TOP 5 | 91.74% | Expected TOP 5 | 91.84% | -0.10% |

| Diff | Winner |
|--------|---------|
| -7.88% | PyTorch |
| -4.69% | PyTorch |

| Diff | Winner |
|--------|---------|
| -6.63% | PyTorch |
| -4.54% | PyTorch |

| Diff | Winner |
|--------|---------|
| -7.29% | PyTorch |
| -4.79% | PyTorch |

Modelli di Keras

| MobileNet | | | | |
|-----------|--------|----------------|--------|--------|
| Guess T1 | 696 | Model Size | 16 MB | |
| Guess T5 | 877 | | | |
| Total | 1000 | | | |
| TOP 1 | 69.60% | Expected TOP 1 | 70.40% | -0.80% |
| TOP 5 | 87.70% | Expected TOP 5 | 89.50% | -1.80% |

| Inception V3 | | | | |
|--------------|--------|----------------|--------|--------|
| Guess T1 | 754 | Model Size | 92 MB | |
| Guess T5 | 926 | | | |
| Total | 1000 | | | |
| TOP 1 | 75.40% | Expected TOP 1 | 77.90% | -2.50% |
| TOP 5 | 92.60% | Expected TOP 5 | 93.70% | -1.10% |

| ResNet152 V2 | | | | |
|--------------|--------|----------------|--------|--------|
| Guess T1 | 690 | Model Size | 232 MB | |
| Guess T5 | 885 | | | |
| Total | 1000 | | | |
| TOP 1 | 69.00% | Expected TOP 1 | 78.00% | -9.00% |
| TOP 5 | 88.50% | Expected TOP 5 | 94.21% | -5.71% |

| ResNet50 V2 | | | | |
|-------------|--------|----------------|--------|---------|
| Guess T1 | 651 | Model Size | 98 MB | |
| Guess T5 | 866 | | | |
| Total | 1000 | | | |
| TOP 1 | 65.10% | Expected TOP 1 | 76.01% | -10.91% |
| TOP 5 | 86.60% | Expected TOP 5 | 92.82% | -6.22% |

Modelli di PyTorch

| MobileNetV2 | | | | |
|-------------|--------|----------------|--------|--------|
| Guess T1 | 711 | Model Size | 14 MB | |
| Guess T5 | 909 | | | |
| Total | 1000 | | | |
| TOP 1 | 71.10% | Expected TOP 1 | 71.88% | -0.78% |
| TOP 5 | 90.90% | Expected TOP 5 | 90.27% | 0.63% |

| Inception V3 | | | | |
|--------------|--------|----------------|--------|-------|
| Guess T1 | 781 | Model Size | 104 MB | |
| Guess T5 | 939 | | | |
| Total | 1000 | | | |
| TOP 1 | 78.10% | Expected TOP 1 | 77.29% | 0.81% |
| TOP 5 | 93.90% | Expected TOP 5 | 93.45% | 0.45% |

| ResNet152 | | | | |
|-----------|--------|----------------|--------|--------|
| Guess T1 | 774 | Model Size | 231 MB | |
| Guess T5 | 947 | | | |
| Total | 1000 | | | |
| TOP 1 | 77.40% | Expected TOP 1 | 78.31% | -0.91% |
| TOP 5 | 94.70% | Expected TOP 5 | 94.05% | 0.65% |

| AlexNet | | | | |
|----------|--------|----------------|--------|-------|
| Guess T1 | 577 | Model Size | 234 MB | |
| Guess T5 | 802 | | | |
| Total | 1000 | | | |
| TOP 1 | 57.70% | Expected TOP 1 | 56.52% | 1.18% |
| TOP 5 | 80.20% | Expected TOP 5 | 79.07% | 1.13% |

Keras VS PyTorch

| Diff * | Winner |
|--------|---------|
| -1.50% | PyTorch |
| -3.20% | PyTorch |

| Diff | Winner |
|--------|---------|
| -2.70% | PyTorch |
| -1.30% | PyTorch |

| Diff * | Winner |
|--------|---------|
| -8.40% | PyTorch |
| -6.20% | PyTorch |

| ResNet50 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 694 | Model Size | 98 MB | |
| Guess T5 | 897 | | | |
| Total | 1000 | | | |
| TOP 1 | 69.40% | Expected TOP 1 | 74.90% | -5.50% |
| TOP 5 | 89.70% | Expected TOP 5 | 91.20% | -1.50% |

| VGG16 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 631 | Model Size | 528 MB | |
| Guess T5 | 856 | | | |
| Total | 1000 | | | |
| TOP 1 | 63.10% | Expected TOP 1 | 71.30% | -8.20% |
| TOP 5 | 85.60% | Expected TOP 5 | 90.01% | -4.41% |

| VGG19 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 649 | Model Size | 549 MB | |
| Guess T5 | 862 | | | |
| Total | 1000 | | | |
| TOP 1 | 64.90% | Expected TOP 1 | 71.30% | -6.40% |
| TOP 5 | 86.20% | Expected TOP 5 | 90.00% | -3.80% |

| ResNet50 | | | | |
|----------|--------|----------------|--------|-------|
| Guess T1 | 763 | Model Size | 98 MB | |
| Guess T5 | 934 | | | |
| Total | 1000 | | | |
| TOP 1 | 76.30% | Expected TOP 1 | 76.13% | 0.17% |
| TOP 5 | 93.40% | Expected TOP 5 | 92.86% | 0.54% |

| VGG16 | | | | |
|----------|--------|----------------|--------|-------|
| Guess T1 | 722 | Model Size | 528 MB | |
| Guess T5 | 910 | | | |
| Total | 1000 | | | |
| TOP 1 | 72.20% | Expected TOP 1 | 71.59% | 0.61% |
| TOP 5 | 91.00% | Expected TOP 5 | 90.38% | 0.62% |

| VGG19 | | | | |
|----------|--------|----------------|--------|--------|
| Guess T1 | 730 | Model Size | 549 MB | |
| Guess T5 | 908 | | | |
| Total | 1000 | | | |
| TOP 1 | 73.00% | Expected TOP 1 | 72.38% | 0.62% |
| TOP 5 | 90.80% | Expected TOP 5 | 90.88% | -0.08% |

| SqueezeNet 1.1 | | | | |
|----------------|--------|----------------|--------|-------|
| Guess T1 | 612 | Model Size | 5 MB | |
| Guess T5 | 817 | | | |
| Total | 1000 | | | |
| TOP 1 | 61.20% | Expected TOP 1 | 58.18% | 3.02% |
| TOP 5 | 81.70% | Expected TOP 5 | 80.62% | 1.08% |

| VGG19 BN | | | | |
|----------|--------|----------------|--------|-------|
| Guess T1 | 746 | Model Size | 549 MB | |
| Guess T5 | 927 | | | |
| Total | 1000 | | | |
| TOP 1 | 74.60% | Expected TOP 1 | 74.22% | 0.38% |
| TOP 5 | 92.70% | Expected TOP 5 | 91.84% | 0.86% |

| Diff | Winner |
|--------|---------|
| -6.90% | PyTorch |
| -3.70% | PyTorch |

| Diff | Winner |
|--------|---------|
| -9.10% | PyTorch |
| -5.40% | PyTorch |

| Diff | Winner |
|--------|---------|
| -8.10% | PyTorch |
| -4.60% | PyTorch |

| ImageNetMini | | A-Line | |
|--------------|-----------|-----------|-----------|
| TOP 1 AVG | TOP 5 AVG | TOP 1 AVG | TOP 5 AVG |
| -10.61% | -7.43% | -12.18% | -8.78% |

MobileNet

| ImageNet Mini | | | | |
|---------------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2676 | | 2284 | Guess T1 |
| Guess T5 | 3480 | | 3220 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 68.21% | -9.99% | 58.22% | TOP 1 |
| TOP 5 | 88.71% | -6.63% | 82.08% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 696 | | 586 | Guess T1 |
| Guess T5 | 877 | | 797 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 69.60% | -11.00% | 58.60% | TOP 1 |
| TOP 5 | 87.70% | -8.00% | 79.70% | TOP 5 |

Inception V3

| ImageNet Mini | | | | |
|---------------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2983 | | 2702 | Guess T1 |
| Guess T5 | 3643 | | 3486 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 76.04% | -7.16% | 68.88% | TOP 1 |
| TOP 5 | 92.86% | -4.00% | 88.86% | TOP 5 |

| A-Line | | | | |
|----------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 754 | | 680 | Guess T1 |
| Guess T5 | 926 | | 883 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 75.40% | -7.40% | 68.00% | TOP 1 |
| TOP 5 | 92.60% | -4.30% | 88.30% | TOP 5 |

ResNet50

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2661 | | 2116 | Guess T1 |
| Guess T5 | 3466 | | 3089 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 67.83% | -13.89% | 53.94% | TOP 1 |
| TOP 5 | 88.35% | -9.61% | 78.74% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 694 | | 532 | Guess T1 |
| Guess T5 | 897 | | 770 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 69.40% | -16.20% | 53.20% | TOP 1 |
| TOP 5 | 89.70% | -12.70% | 77.00% | TOP 5 |

ResNet152 V2

| ImageNet Mini | | | | |
|---------------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2699 | | 2369 | Guess T1 |
| Guess T5 | 3496 | | 3264 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 68.80% | -8.41% | 60.39% | TOP 1 |
| TOP 5 | 89.12% | -5.91% | 83.20% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 690 | | 589 | Guess T1 |
| Guess T5 | 885 | | 822 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 69.00% | -10.10% | 58.90% | TOP 1 |
| TOP 5 | 88.50% | -6.30% | 82.20% | TOP 5 |

VGG19

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2516 | | 1982 | Guess T1 |
| Guess T5 | 3365 | | 2934 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 64.13% | -13.61% | 50.52% | TOP 1 |
| TOP 5 | 85.78% | -10.99% | 74.79% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 649 | | 487 | Guess T1 |
| Guess T5 | 862 | | 736 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 64.90% | -16.20% | 48.70% | TOP 1 |
| TOP 5 | 86.20% | -12.60% | 73.60% | TOP 5 |

| ImageNet Mini | |
|---------------|-----------|
| TOP 1 AVG | TOP 5 AVG |
| -13.58% | -9.37% |

| A-Line | |
|-----------|-----------|
| TOP 1 AVG | TOP 5 AVG |
| -14.60% | -9.99% |

MobileNetV2

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2809 | | 2319 | Guess T1 |
| Guess T5 | 3524 | | 3240 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 71.60% | -12.49% | 59.11% | TOP 1 |
| TOP 5 | 89.83% | -7.24% | 82.59% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 711 | | 588 | Guess T1 |
| Guess T5 | 909 | | 828 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 71.10% | -12.30% | 58.80% | TOP 1 |
| TOP 5 | 90.90% | -8.10% | 82.80% | TOP 5 |

Inception V3

| ImageNet Mini | | | | |
|---------------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 3015 | | 2757 | Guess T1 |
| Guess T5 | 3651 | | 3509 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 76.85% | -6.58% | 70.28% | TOP 1 |
| TOP 5 | 93.07% | -3.62% | 89.45% | TOP 5 |

| A-Line | | | | |
|----------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 781 | | 693 | Guess T1 |
| Guess T5 | 939 | | 903 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 78.10% | -8.80% | 69.30% | TOP 1 |
| TOP 5 | 93.90% | -3.60% | 90.30% | TOP 5 |

ResNet152

| ImageNet Mini | | | | |
|---------------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 3001 | | 2682 | Guess T1 |
| Guess T5 | 3678 | | 3517 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 76.50% | -8.13% | 68.37% | TOP 1 |
| TOP 5 | 93.75% | -4.10% | 89.65% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 774 | | 673 | Guess T1 |
| Guess T5 | 947 | | 888 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 77.40% | -10.10% | 67.30% | TOP 1 |
| TOP 5 | 94.70% | -5.90% | 88.80% | TOP 5 |

AlexNet

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2209 | | 1383 | Guess T1 |
| Guess T5 | 3099 | | 2315 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 56.31% | -21.06% | 35.25% | TOP 1 |
| TOP 5 | 79.00% | -19.98% | 59.01% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 577 | | 349 | Guess T1 |
| Guess T5 | 802 | | 564 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 57.70% | -22.80% | 34.90% | TOP 1 |
| TOP 5 | 80.20% | -23.80% | 56.40% | TOP 5 |

ResNet50

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2970 | | 2525 | Guess T1 |
| Guess T5 | 3650 | | 3419 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 75.71% | -11.34% | 64.36% | TOP 1 |
| TOP 5 | 93.04% | -5.89% | 87.15% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 763 | | 644 | Guess T1 |
| Guess T5 | 934 | | 863 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 76.30% | -11.90% | 64.40% | TOP 1 |
| TOP 5 | 93.40% | -7.10% | 86.30% | TOP 5 |

VGG16

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2762 | | 2288 | Guess T1 |
| Guess T5 | 3547 | | 3233 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 70.41% | -12.08% | 58.32% | TOP 1 |
| TOP 5 | 90.42% | -8.00% | 82.41% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 722 | | 552 | Guess T1 |
| Guess T5 | 910 | | 812 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 72.20% | -17.00% | 55.20% | TOP 1 |
| TOP 5 | 91.00% | -9.80% | 81.20% | TOP 5 |

VGG19

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2802 | | 2365 | Guess T1 |
| Guess T5 | 3553 | | 3263 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 71.42% | -11.14% | 60.29% | TOP 1 |
| TOP 5 | 90.57% | -7.39% | 83.18% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 730 | | 564 | Guess T1 |
| Guess T5 | 908 | | 821 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 73.00% | -16.60% | 56.40% | TOP 1 |
| TOP 5 | 90.80% | -8.70% | 82.10% | TOP 5 |

SqueezeNet 1.1

| ImageNet Mini | | | | |
|---------------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2809 | | 1630 | Guess T1 |
| Guess T5 | 3524 | | 2620 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 71.60% | -30.05% | 41.55% | TOP 1 |
| TOP 5 | 89.83% | -23.04% | 66.79% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 612 | | 406 | Guess T1 |
| Guess T5 | 817 | | 658 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 61.20% | -20.60% | 40.60% | TOP 1 |
| TOP 5 | 81.70% | -15.90% | 65.80% | TOP 5 |

VGG19 BN

| ImageNet Mini | | | | |
|---------------|--------|--------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 2877 | | 2512 | Guess T1 |
| Guess T5 | 3599 | | 3399 | Guess T5 |
| Total | 3923 | | 3923 | Total |
| TOP 1 | 73.34% | -9.30% | 64.03% | TOP 1 |
| TOP 5 | 91.74% | -5.10% | 86.64% | TOP 5 |

| A-Line | | | | |
|----------|--------|---------|-----------|----------|
| Normal | | Vs | GrayScale | |
| Guess T1 | 746 | | 633 | Guess T1 |
| Guess T5 | 927 | | 857 | Guess T5 |
| Total | 1000 | | 1000 | Total |
| TOP 1 | 74.60% | -11.30% | 63.30% | TOP 1 |
| TOP 5 | 92.70% | -7.00% | 85.70% | TOP 5 |

| MobileNet | | | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 696 | 603 | 600 | 617 | 611 | 618 |
| Guess T5 | 877 | 842 | 840 | 837 | 831 | 838 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 69.60% | 60.30% | 60.00% | 61.70% | 61.10% | 61.80% |
| TOP 5 | 87.70% | 84.20% | 84.00% | 83.70% | 83.10% | 83.80% |
| Diff TOP 1 | | -9.30% | -9.60% | -7.90% | -8.50% | -7.80% |
| Diff TOP 5 | | -3.50% | -3.70% | -4.00% | -4.60% | -3.90% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 696 | 602 | 618 | 607 | 617 | 606 |
| Guess T5 | 877 | 830 | 839 | 839 | 824 | 835 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 69.60% | 60.20% | 61.80% | 60.70% | 61.70% | 60.60% |
| TOP 5 | 87.70% | 83.00% | 83.90% | 83.90% | 82.40% | 83.50% |
| Diff TOP 1 | | -9.40% | -7.80% | -8.90% | -7.90% | -9.00% |
| Diff TOP 5 | | -4.70% | -3.80% | -3.80% | -5.30% | -4.20% |

No Filters Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234 Seed applicato alla generazione random dei filtri

Filtered Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -8.61% | -4.15% |

| InceptionV3 | | | | | | |
|-------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 754 | 708 | 701 | 711 | 702 | 689 |
| Guess T5 | 926 | 899 | 899 | 903 | 904 | 908 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 75.40% | 70.80% | 70.10% | 71.10% | 70.20% | 68.90% |
| TOP 5 | 92.60% | 89.90% | 89.90% | 90.30% | 90.40% | 90.80% |
| Diff TOP 1 | | -4.60% | -5.30% | -4.30% | -5.20% | -6.50% |
| Diff TOP 5 | | -2.70% | -2.70% | -2.30% | -2.20% | -1.80% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 754 | 712 | 705 | 700 | 701 | 709 |
| Guess T5 | 926 | 905 | 902 | 898 | 907 | 895 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 75.40% | 71.20% | 70.50% | 70.00% | 70.10% | 70.90% |
| TOP 5 | 92.60% | 90.50% | 90.20% | 89.80% | 90.70% | 89.50% |
| Diff TOP 1 | | -4.20% | -4.90% | -5.40% | -5.30% | -4.50% |
| Diff TOP 5 | | -2.10% | -2.40% | -2.80% | -1.90% | -3.10% |

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -5.02% | -2.40% |

| ResNet152 V2 | | | | | | |
|--------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 690 | 611 | 614 | 601 | 607 | 612 |
| Guess T5 | 885 | 824 | 837 | 840 | 828 | 825 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 69.00% | 61.10% | 61.40% | 60.10% | 60.70% | 61.20% |
| TOP 5 | 88.50% | 82.40% | 83.70% | 84.00% | 82.80% | 82.50% |
| Diff TOP 1 | | -7.90% | -7.60% | -8.90% | -8.30% | -7.80% |
| Diff TOP 5 | | -6.10% | -4.80% | -4.50% | -5.70% | -6.00% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 690 | 608 | 606 | 604 | 613 | 617 |
| Guess T5 | 885 | 837 | 841 | 833 | 837 | 827 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 69.00% | 60.80% | 60.60% | 60.40% | 61.30% | 61.70% |
| TOP 5 | 88.50% | 83.70% | 84.10% | 83.30% | 83.70% | 82.70% |
| Diff TOP 1 | | -8.20% | -8.40% | -8.60% | -7.70% | -7.30% |
| Diff TOP 5 | | -4.80% | -4.40% | -5.20% | -4.80% | -5.80% |

| ResNet50 V2 | | | | | | |
|-------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 651 | 568 | 576 | 575 | 569 | 576 |
| Guess T5 | 866 | 805 | 807 | 798 | 799 | 807 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 65.10% | 56.80% | 57.60% | 57.50% | 56.90% | 57.60% |
| TOP 5 | 86.60% | 80.50% | 80.70% | 79.80% | 79.90% | 80.70% |
| Diff TOP 1 | | -8.30% | -7.50% | -7.60% | -8.20% | -7.50% |
| Diff TOP 5 | | -6.10% | -5.90% | -6.80% | -6.70% | -5.90% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 651 | 578 | 558 | 570 | 571 | 578 |
| Guess T5 | 866 | 802 | 795 | 808 | 805 | 795 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 65.10% | 57.80% | 55.80% | 57.00% | 57.10% | 57.80% |
| TOP 5 | 86.60% | 80.20% | 79.50% | 80.80% | 80.50% | 79.50% |
| Diff TOP 1 | | -7.30% | -9.30% | -8.10% | -8.00% | -7.30% |
| Diff TOP 5 | | -6.40% | -7.10% | -5.80% | -6.10% | -7.10% |

No Filters Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234 Seed applicato alla generazione random dei filtri

Filtered Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

TOP 1 AVG TOP 5 AVG
-8.07% -5.21%

TOP 1 AVG TOP 5 AVG
-7.91% -6.39%

| ResNet50 | | | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 694 | 553 | 544 | 547 | 539 | 533 |
| Guess T5 | 897 | 781 | 787 | 784 | 785 | 773 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 69.40% | 55.30% | 54.40% | 54.70% | 53.90% | 53.30% |
| TOP 5 | 89.70% | 78.10% | 78.70% | 78.40% | 78.50% | 77.30% |
| Diff TOP 1 | | -14.10% | -15.00% | -14.70% | -15.50% | -16.10% |
| Diff TOP 5 | | -11.60% | -11.00% | -11.30% | -11.20% | -12.40% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 694 | 551 | 535 | 538 | 553 | 546 |
| Guess T5 | 897 | 774 | 777 | 784 | 770 | 785 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 69.40% | 55.10% | 53.50% | 53.80% | 55.30% | 54.60% |
| TOP 5 | 89.70% | 77.40% | 77.70% | 78.40% | 77.00% | 78.50% |
| Diff TOP 1 | | -14.30% | -15.90% | -15.60% | -14.10% | -14.80% |
| Diff TOP 5 | | -12.30% | -12.00% | -11.30% | -12.70% | -11.20% |

| VGG16 | | | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 631 | 517 | 527 | 528 | 523 | 522 |
| Guess T5 | 856 | 758 | 767 | 753 | 767 | 753 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 63.10% | 51.70% | 52.70% | 52.80% | 52.30% | 52.20% |
| TOP 5 | 85.60% | 75.80% | 76.70% | 75.30% | 76.70% | 75.30% |
| Diff TOP 1 | | -11.40% | -10.40% | -10.30% | -10.80% | -10.90% |
| Diff TOP 5 | | -9.80% | -8.90% | -10.30% | -8.90% | -10.30% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 631 | 520 | 522 | 527 | 523 | 512 |
| Guess T5 | 856 | 768 | 767 | 759 | 763 | 754 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 63.10% | 52.00% | 52.20% | 52.70% | 52.30% | 51.20% |
| TOP 5 | 85.60% | 76.80% | 76.70% | 75.90% | 76.30% | 75.40% |
| Diff TOP 1 | | -11.10% | -10.90% | -10.40% | -10.80% | -11.90% |
| Diff TOP 5 | | -8.80% | -8.90% | -9.70% | -9.30% | -10.20% |

No Filters Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234 Seed applicato alla generazione random dei filtri

Filtered Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -15.01% | -11.70% |

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -10.89% | -9.51% |

| | | VGG19 | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 649 | 534 | 547 | 533 | 539 | 539 |
| Guess T5 | 862 | 778 | 785 | 781 | 788 | 777 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 64.90% | 53.40% | 54.70% | 53.30% | 53.90% | 53.90% |
| TOP 5 | 86.20% | 77.80% | 78.50% | 78.10% | 78.80% | 77.70% |
| Diff TOP 1 | | -11.50% | -10.20% | -11.60% | -11.00% | -11.00% |
| Diff TOP 5 | | -8.40% | -7.70% | -8.10% | -7.40% | -8.50% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 649 | 533 | 528 | 533 | 534 | 537 |
| Guess T5 | 862 | 777 | 781 | 773 | 787 | 776 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 64.90% | 53.30% | 52.80% | 53.30% | 53.40% | 53.70% |
| TOP 5 | 86.20% | 77.70% | 78.10% | 77.30% | 78.70% | 77.60% |
| Diff TOP 1 | | -11.60% | -12.10% | -11.60% | -11.50% | -11.20% |
| Diff TOP 5 | | -8.50% | -8.10% | -8.90% | -7.50% | -8.60% |

No Filters

Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234

Seed applicato alla generazione random dei filtri

Filtered

Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

TOP 1 AVGTOP 5 AVG

-11.33%-8.17%

| MobileNet V2 | | | | | | |
|--------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 711 | 584 | 603 | 604 | 592 | 617 |
| Guess T5 | 909 | 845 | 836 | 836 | 847 | 846 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 71.10% | 58.40% | 60.30% | 60.40% | 59.20% | 61.70% |
| TOP 5 | 90.90% | 84.50% | 83.60% | 83.60% | 84.70% | 84.60% |
| Diff TOP 1 | | -12.70% | -10.80% | -10.70% | -11.90% | -9.40% |
| Diff TOP 5 | | -6.40% | -7.30% | -7.30% | -6.20% | -6.30% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 711 | 619 | 605 | 598 | 598 | 594 |
| Guess T5 | 909 | 846 | 837 | 837 | 843 | 834 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 71.10% | 61.90% | 60.50% | 59.80% | 59.80% | 59.40% |
| TOP 5 | 90.90% | 84.60% | 83.70% | 83.70% | 84.30% | 83.40% |
| Diff TOP 1 | | -9.20% | -10.60% | -11.30% | -11.30% | -11.70% |
| Diff TOP 5 | | -6.30% | -7.20% | -7.20% | -6.60% | -7.50% |

| Inception V3 | | | | | | |
|--------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 781 | 725 | 728 | 721 | 728 | 735 |
| Guess T5 | 939 | 921 | 915 | 914 | 918 | 918 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 78.10% | 72.50% | 72.80% | 72.10% | 72.80% | 73.50% |
| TOP 5 | 93.90% | 92.10% | 91.50% | 91.40% | 91.80% | 91.80% |
| Diff TOP 1 | | -5.60% | -5.30% | -6.00% | -5.30% | -4.60% |
| Diff TOP 5 | | -1.80% | -2.40% | -2.50% | -2.10% | -2.10% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 781 | 722 | 729 | 731 | 732 | 727 |
| Guess T5 | 939 | 918 | 922 | 912 | 916 | 921 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 78.10% | 72.20% | 72.90% | 73.10% | 73.20% | 72.70% |
| TOP 5 | 93.90% | 91.80% | 92.20% | 91.20% | 91.60% | 92.10% |
| Diff TOP 1 | | -5.90% | -5.20% | -5.00% | -4.90% | -5.40% |
| Diff TOP 5 | | -2.10% | -1.70% | -2.70% | -2.30% | -1.80% |

No Filters Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234 Seed applicato alla generazione random dei filtri

Filtered Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

TOP 1 AVG TOP 5 AVG
-10.96% -6.83%

TOP 1 AVG TOP 5 AVG
-5.32% -2.15%

| ResNet152 | | | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 774 | 682 | 688 | 694 | 687 | 690 |
| Guess T5 | 947 | 914 | 894 | 903 | 907 | 900 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 77.40% | 68.20% | 68.80% | 69.40% | 68.70% | 69.00% |
| TOP 5 | 94.70% | 91.40% | 89.40% | 90.30% | 90.70% | 90.00% |
| Diff TOP 1 | | -9.20% | -8.60% | -8.00% | -8.70% | -8.40% |
| Diff TOP 5 | | -3.30% | -5.30% | -4.40% | -4.00% | -4.70% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 774 | 691 | 688 | 689 | 691 | 692 |
| Guess T5 | 947 | 906 | 906 | 904 | 909 | 905 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 77.40% | 69.10% | 68.80% | 68.90% | 69.10% | 69.20% |
| TOP 5 | 94.70% | 90.60% | 90.60% | 90.40% | 90.90% | 90.50% |
| Diff TOP 1 | | -8.30% | -8.60% | -8.50% | -8.30% | -8.20% |
| Diff TOP 5 | | -4.10% | -4.10% | -4.30% | -3.80% | -4.20% |

| Seeds | | AlexNet | | | | |
|------------|--------|----------|----------|----------|----------|----------|
| | | 69 | 666 | 777 | 911 | 119 |
| No Filters | | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 577 | 428 | 421 | 418 | 413 | 428 |
| Guess T5 | 802 | 668 | 664 | 665 | 665 | 667 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 57.70% | 42.80% | 42.10% | 41.80% | 41.30% | 42.80% |
| TOP 5 | 80.20% | 66.80% | 66.40% | 66.50% | 66.50% | 66.70% |
| Diff TOP 1 | | -14.90% | -15.60% | -15.90% | -16.40% | -14.90% |
| Diff TOP 5 | | -13.40% | -13.80% | -13.70% | -13.70% | -13.50% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 577 | 422 | 413 | 423 | 419 | 415 |
| Guess T5 | 802 | 667 | 657 | 659 | 668 | 648 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 57.70% | 42.20% | 41.30% | 42.30% | 41.90% | 41.50% |
| TOP 5 | 80.20% | 66.70% | 65.70% | 65.90% | 66.80% | 64.80% |
| Diff TOP 1 | | -15.50% | -16.40% | -15.40% | -15.80% | -16.20% |
| Diff TOP 5 | | -13.50% | -14.50% | -14.30% | -13.40% | -15.40% |

No Filters Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234 Seed applicato alla generazione random dei filtri

Filtered Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -8.48% | -4.22% |

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -15.70% | -13.92% |

| | | ResNet50 | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 763 | 665 | 663 | 667 | 669 | 662 |
| Guess T5 | 934 | 885 | 870 | 880 | 880 | 878 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 76.30% | 66.50% | 66.30% | 66.70% | 66.90% | 66.20% |
| TOP 5 | 93.40% | 88.50% | 87.00% | 88.00% | 88.00% | 87.80% |
| Diff TOP 1 | | -9.80% | -10.00% | -9.60% | -9.40% | -10.10% |
| Diff TOP 5 | | -4.90% | -6.40% | -5.40% | -5.40% | -5.60% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 763 | 658 | 673 | 663 | 661 | 667 |
| Guess T5 | 934 | 883 | 882 | 887 | 880 | 884 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 76.30% | 65.80% | 67.30% | 66.30% | 66.10% | 66.70% |
| TOP 5 | 93.40% | 88.30% | 88.20% | 88.70% | 88.00% | 88.40% |
| Diff TOP 1 | | -10.50% | -9.00% | -10.00% | -10.20% | -9.60% |
| Diff TOP 5 | | -5.10% | -5.20% | -4.70% | -5.40% | -5.00% |

| | | VGG16 | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 722 | 606 | 610 | 617 | 622 | 617 |
| Guess T5 | 910 | 846 | 845 | 843 | 848 | 845 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 72.20% | 60.60% | 61.00% | 61.70% | 62.20% | 61.70% |
| TOP 5 | 91.00% | 84.60% | 84.50% | 84.30% | 84.80% | 84.50% |
| Diff TOP 1 | | -11.60% | -11.20% | -10.50% | -10.00% | -10.50% |
| Diff TOP 5 | | -6.40% | -6.50% | -6.70% | -6.20% | -6.50% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 722 | 615 | 608 | 615 | 609 | 602 |
| Guess T5 | 910 | 841 | 838 | 849 | 846 | 845 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 72.20% | 61.50% | 60.80% | 61.50% | 60.90% | 60.20% |
| TOP 5 | 91.00% | 84.10% | 83.80% | 84.90% | 84.60% | 84.50% |
| Diff TOP 1 | | -10.70% | -11.40% | -10.70% | -11.30% | -12.00% |
| Diff TOP 5 | | -6.90% | -7.20% | -6.10% | -6.40% | -6.50% |

No Filters Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234 Seed applicato alla generazione random dei filtri

Filtered Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -9.82% | -5.31% |

| TOP 1 AVG | TOP 5 AVG |
|-----------|-----------|
| -10.99% | -6.54% |

| | | VGG19 | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 730 | 621 | 618 | 630 | 618 | 631 |
| Guess T5 | 908 | 874 | 850 | 862 | 850 | 850 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 73.00% | 62.10% | 61.80% | 63.00% | 61.80% | 63.10% |
| TOP 5 | 90.80% | 87.40% | 85.00% | 86.20% | 85.00% | 85.00% |
| Diff TOP 1 | | -10.90% | -11.20% | -10.00% | -11.20% | -9.90% |
| Diff TOP 5 | | -3.40% | -5.80% | -4.60% | -5.80% | -5.80% |

No Filters Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234 Seed applicato alla generazione random dei filtri

Filtered Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 730 | 633 | 628 | 639 | 629 | 620 |
| Guess T5 | 908 | 857 | 853 | 854 | 866 | 854 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 73.00% | 63.30% | 62.80% | 63.90% | 62.90% | 62.00% |
| TOP 5 | 90.80% | 85.70% | 85.30% | 85.40% | 86.60% | 85.40% |
| Diff TOP 1 | | -9.70% | -10.20% | -9.10% | -10.10% | -11.00% |
| Diff TOP 5 | | -5.10% | -5.50% | -5.40% | -4.20% | -5.40% |

TOP 1 AVG TOP 5 AVG
-10.33% -5.10%

| | | SqueezeNet 1.1 | | | | |
|------------|------------|----------------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 612 | 450 | 468 | 457 | 457 | 458 |
| Guess T5 | 817 | 706 | 697 | 698 | 698 | 708 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 61.20% | 45.00% | 46.80% | 45.70% | 45.70% | 45.80% |
| TOP 5 | 81.70% | 70.60% | 69.70% | 69.80% | 69.80% | 70.80% |
| Diff TOP 1 | | -16.20% | -14.40% | -15.50% | -15.50% | -15.40% |
| Diff TOP 5 | | -11.10% | -12.00% | -11.90% | -11.90% | -10.90% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 612 | 459 | 447 | 443 | 459 | 463 |
| Guess T5 | 817 | 703 | 701 | 712 | 709 | 695 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 61.20% | 45.90% | 44.70% | 44.30% | 45.90% | 46.30% |
| TOP 5 | 81.70% | 70.30% | 70.10% | 71.20% | 70.90% | 69.50% |
| Diff TOP 1 | | -15.30% | -16.50% | -16.90% | -15.30% | -14.90% |
| Diff TOP 5 | | -11.40% | -11.60% | -10.50% | -10.80% | -12.20% |

TOP 1 AVG TOP 5 AVG
-15.59% -11.43%

| | | VGG19 BN | | | | |
|------------|------------|----------|----------|----------|----------|----------|
| Seeds | | 69 | 666 | 777 | 911 | 119 |
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 746 | 667 | 666 | 655 | 658 | 657 |
| Guess T5 | 927 | 886 | 882 | 881 | 880 | 878 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 74.60% | 66.70% | 66.60% | 65.50% | 65.80% | 65.70% |
| TOP 5 | 92.70% | 88.60% | 88.20% | 88.10% | 88.00% | 87.80% |
| Diff TOP 1 | | -7.90% | -8.00% | -9.10% | -8.80% | -8.90% |
| Diff TOP 5 | | -4.10% | -4.50% | -4.60% | -4.70% | -4.90% |

| Seeds | | 420 | 1308 | 7 | 23 | 9 |
|------------|------------|----------|----------|----------|----------|----------|
| | No Filters | Filtered | Filtered | Filtered | Filtered | Filtered |
| Guess T1 | 746 | 664 | 665 | 659 | 670 | 650 |
| Guess T5 | 927 | 873 | 887 | 885 | 886 | 878 |
| Total | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| TOP 1 | 74.60% | 66.40% | 66.50% | 65.90% | 67.00% | 65.00% |
| TOP 5 | 92.70% | 87.30% | 88.70% | 88.50% | 88.60% | 87.80% |
| Diff TOP 1 | | -8.20% | -8.10% | -8.70% | -7.60% | -9.60% |
| Diff TOP 5 | | -5.40% | -4.00% | -4.20% | -4.10% | -4.90% |

No Filters

Risultati ottenuti dai modelli con le immagini originali del dataset Aline

1234

Seed applicato alla generazione random dei filtri

Filtered

Risultati ottenuti dal testing dei modelli con le immagini del dataset Aline alterato dai filtri di Diego.

TOP 1 AVG

TOP 5 AVG

-8.49%

-4.54%