# Computer Vision - Tema 1

#### • Generare mozaic cu aranjare in stil caroiaj:

Se observa faptul ca numarul de piese pe orizontala are un impact sesizabil asupra calitatii imaginii. Cu cat numarul de piese folosite este mai mare, cu atat calitatea este mai buna deoarece culoarea unui bloc de pixeli este mai uniforma, iar potrivirea culorilor este mai buna. De asemenea, la dimensiuni mici, detaliile pozelor mici se pierd, iar culoarea medie este mai bin e scoasa in evidenta.



Figure 1 - Aranjare caroiaj, 100 de piese

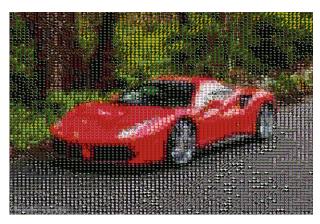


Figure 2 - Aranjare caroiaj, 75 de piese



Figure 3 - Aranjare caroiaj, 50 de piese



Figure 4 - Aranjare caroiaj, 25 de piese

### Generare mozaic cu aranjare aleatoare a pieselor:



Figure 5 - Aranjare random, 100 de piese



Figure 6 - Aranjare random, 100 de piese, zoom



Figure 7 - Aranjare random, 75 de piese



Figure 8 - Aranjare random, 75 de piese, zoom



Figure 9 - Aranjare random, 100 de piese

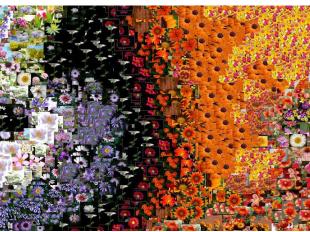


Figure 10 - Aranjare random, 100 de piese, zoom

# • Generare mozaic cu aranjare in stil grila a pieselor, vecini diferiti:



Figure 11 - Aranjare caroiaj, vecini diferiti, 100 de piese



Figure 12 - Aranjare caroiaj, vecini diferiti, 100 de piese, zoom

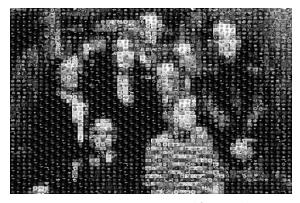


Figure 13 - Aranjare caroiaj, vecini diferiti, 50 de piese

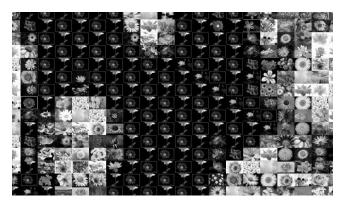


Figure 14 - Aranjare caroiaj, vecini diferiti, 50 de piese, zoom

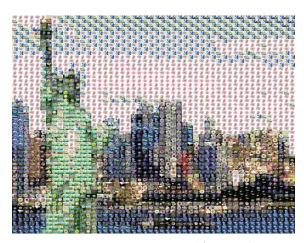


Figure 15 - Aranjare caroiaj, vecini diferiti, 75 de piese



Figure 16 - Aranjare caroiaj, vecini diferiti, 75 de piese, zoom

### Generare mozaic, colectie CIFAR-10:



Figure 17 - Colectie CIFAR, cars, 100 de piese



Figure 18 - Colectie CIFAR, cars, 100 de piese, zoom



Figure 19 - Colectie CIFAR, airplanes, 100 de poze

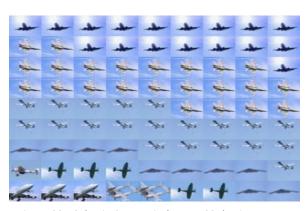


Figure 20 - Colectie CIFAR, airplanes, 100 de piese, zoom



Figure 21 - Colectie CIFAR, birds, 100 de piese



Figure 22 - Colectie CIFAR, birds, 100 de piese, zoom

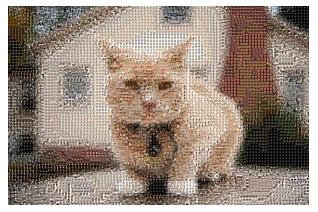


Figure 23 - Colectie CIFAR, cats, 100 de piese



Figure 24 - Colectie CIFAR, cats, 100 de piese, zoom



Figure 25 - Colectie CIFAR, deers, 100 de piese



Figure 26 - Colectie CIFAR, deers, 100 de piese, zoom

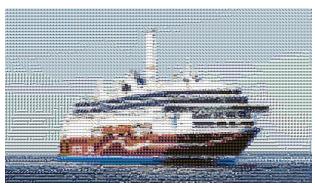


Figure 27 - Colectie CIFAR, ships, 100 de piese



Figure 28 - Colectie CIFAR, boats, 100 de piese, zoom

### Generare mozaic, folosind piese hexagonale:



Figure 29 - Piese hexagonale, 100 de piese

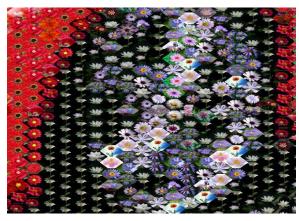


Figure 30 - Piese hexagonale, 100 de piese, zoom



Figure 31 - Piese hexagonale, 100 de piese

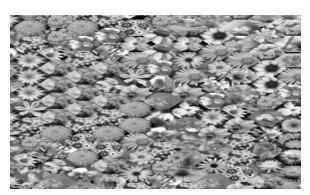


Figure 32 - Piese hexagonale, 100 de piese, zoom



Figure 33 - Piese hexagonale, 50 de piese



Figure 34 - Piese hexagonale, 50 de piese, zoom

### • Generare mozaic folosind piese hexagonale, vecini diferiti:

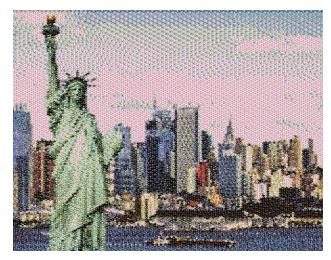


Figure 35 - Piese hexagonale, vecini diferiti, 100 de piese

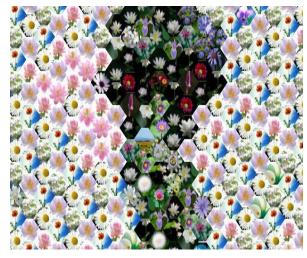


Figure 36 - Piese hexagonale, vecini diferiti, 100 de piese, zoom



Figure 37 - Piese hexagonale, vecini diferiti, 75 de piese

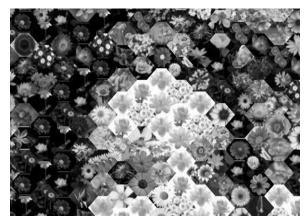


Figure 38 - Piese hexagonale, vecini diferiti, 75 de piese, zoom

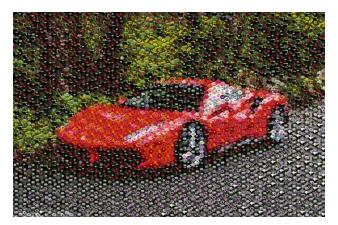


Figure 39 - Piese hexagonale, vecini diferiti, 50 de piese



Figure 40 - Piese hexagonale, vecini diferiti, 50 de piese, zoom