

Inteligență Artificială

Proiect 3

Sinteza și transferul texturii

Echipa

Proiect realizat de:

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- Paraschiv Razvan

Profesori coordonatori:

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- Nisioi Sergiu
- Alexe Bogdan

(a)

Sintetizarea imaginii

Exemplul 1



metodaSinteza = 'blocuriAleatoare'



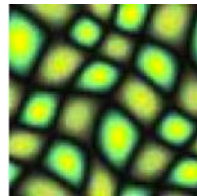
metodaSinteza = 'eroareSuprapunere'



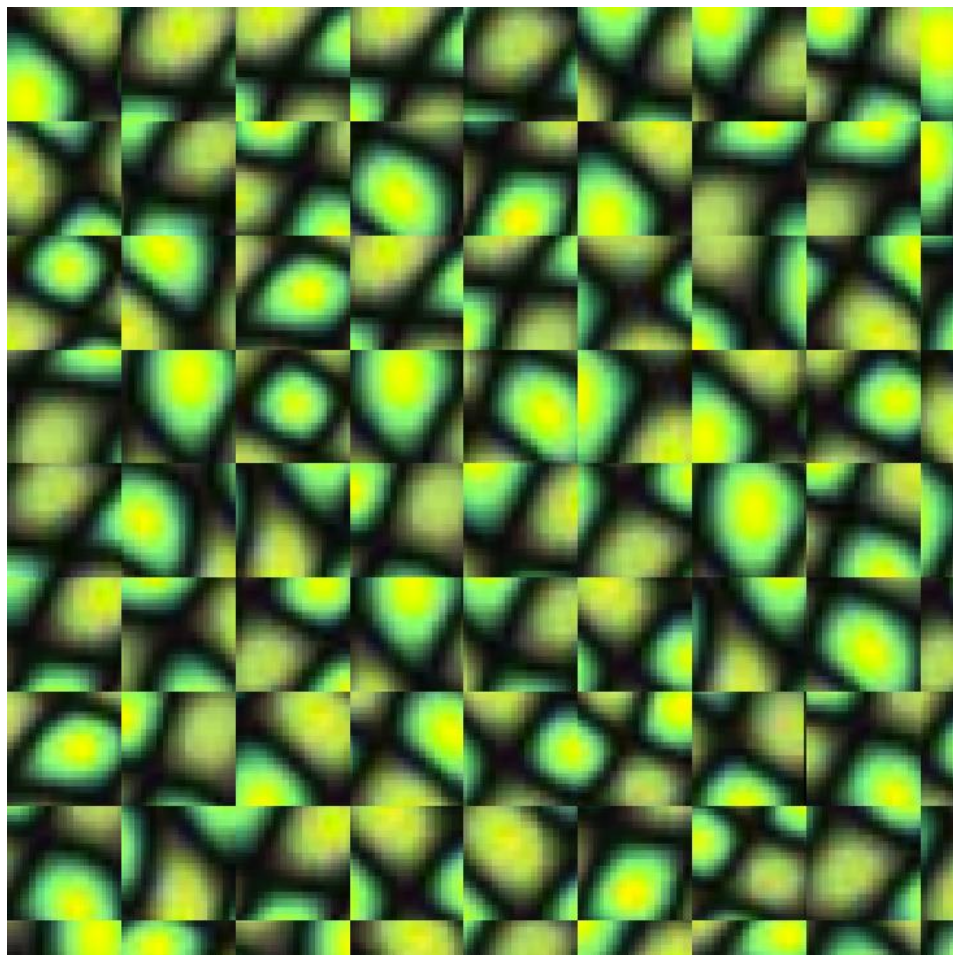
metodaSinteza = 'frontieraMinima'



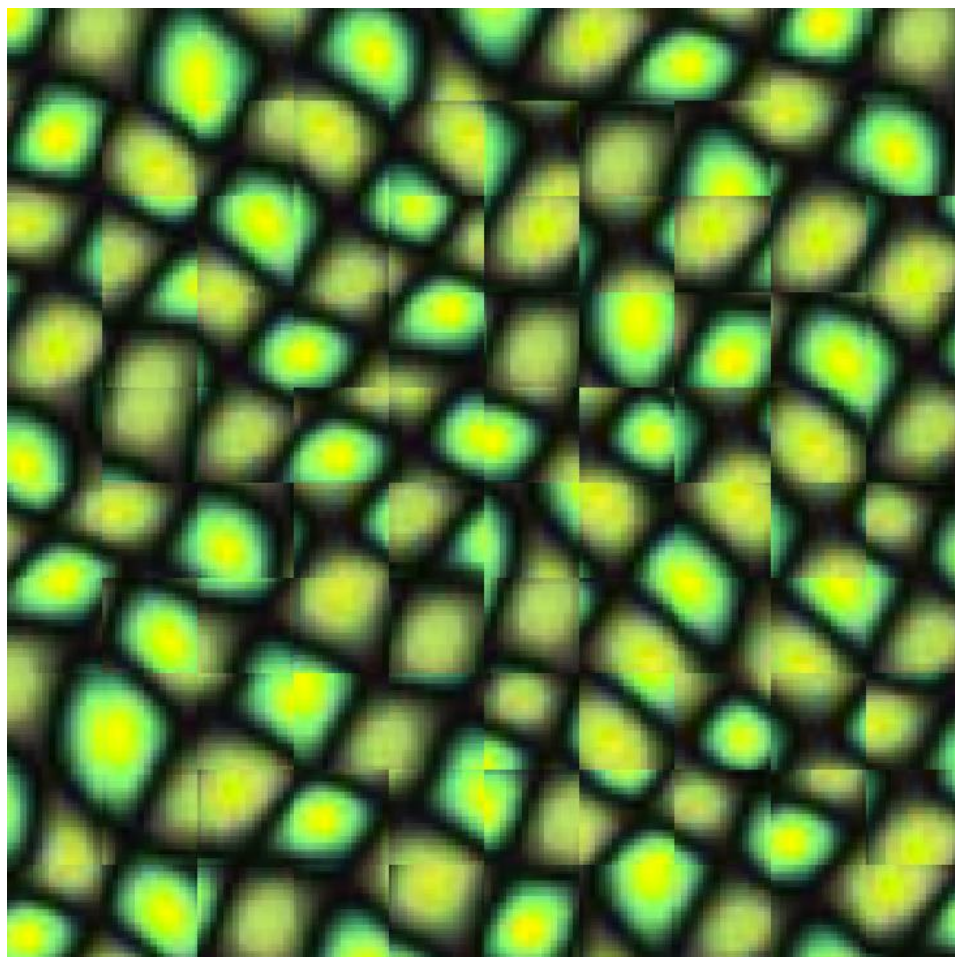
Exemplul 2



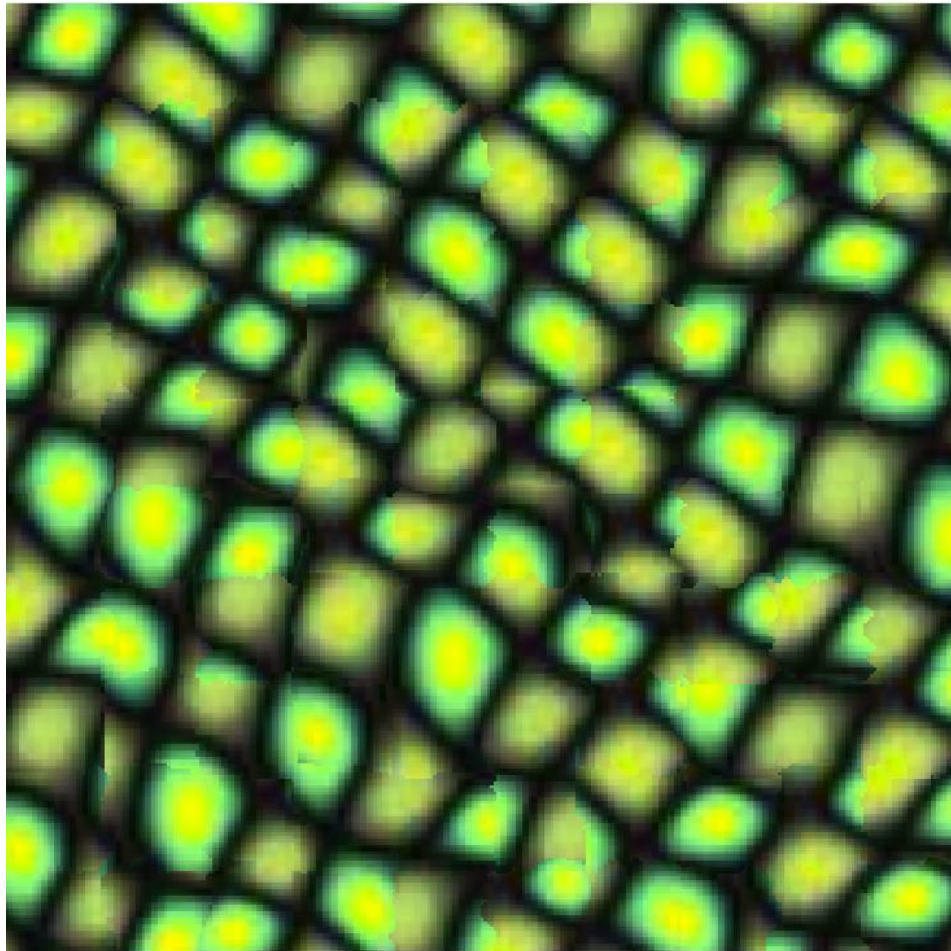
metodaSinteza = 'blocuriAleatoare'



metodaSinteza = 'eroareSuprapunere'



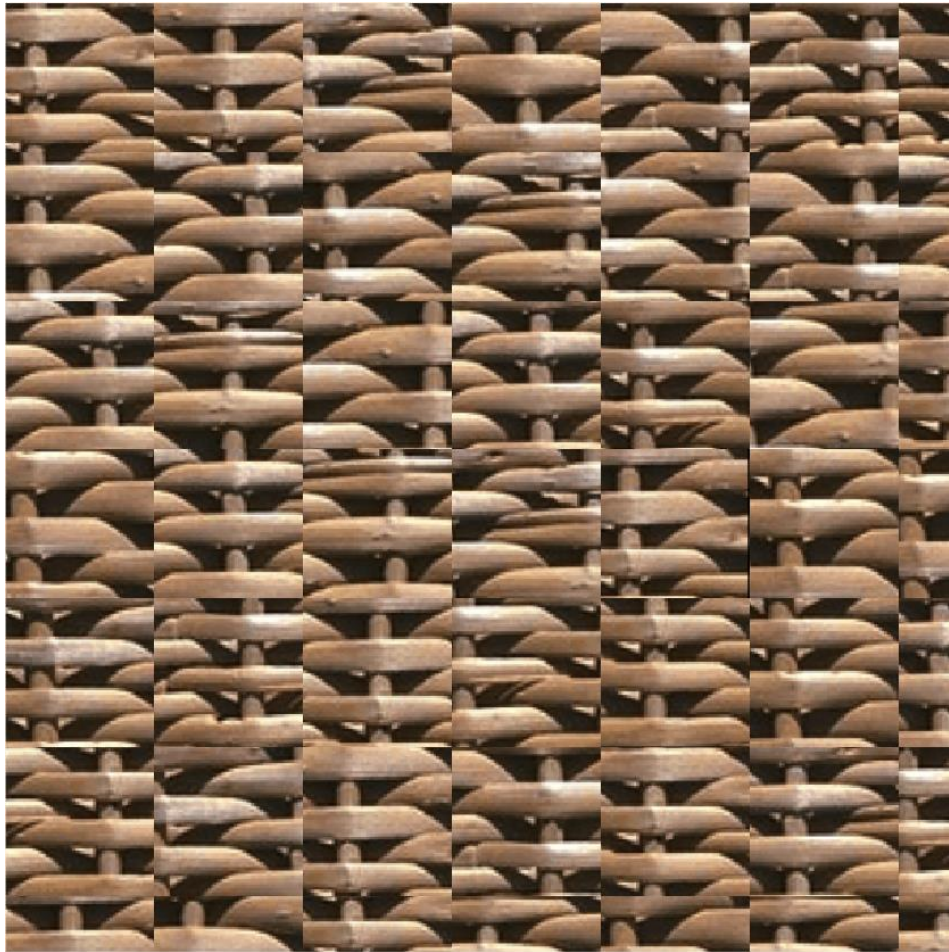
metodaSinteza = 'frontieraMinima'



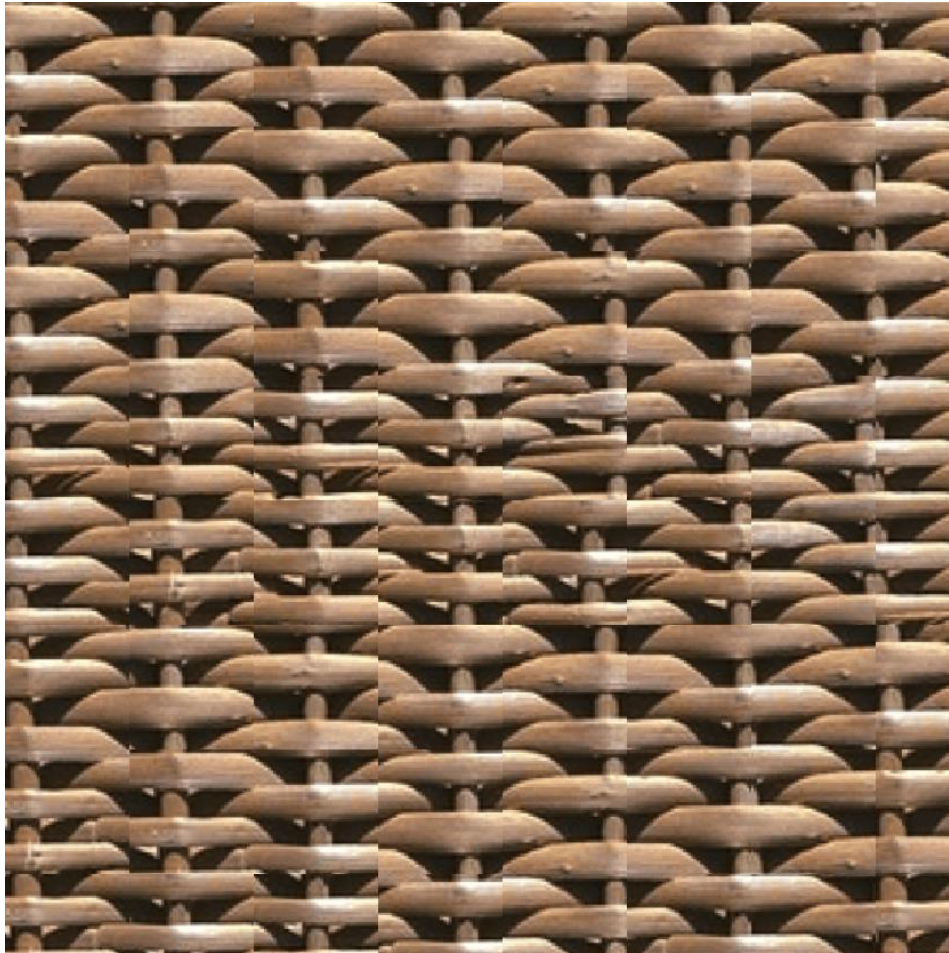
Exemplul 3



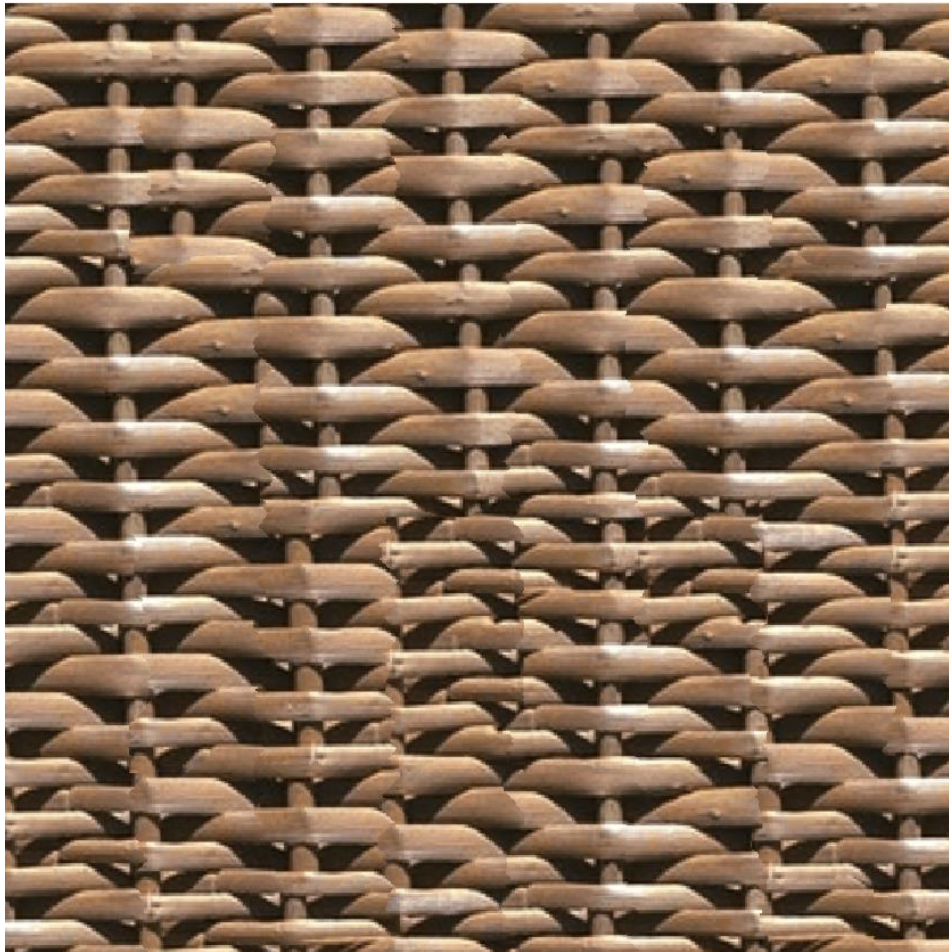
metodaSinteza = 'blocuriAleatoare'



metodaSinteza = 'eroareSuprapunere'



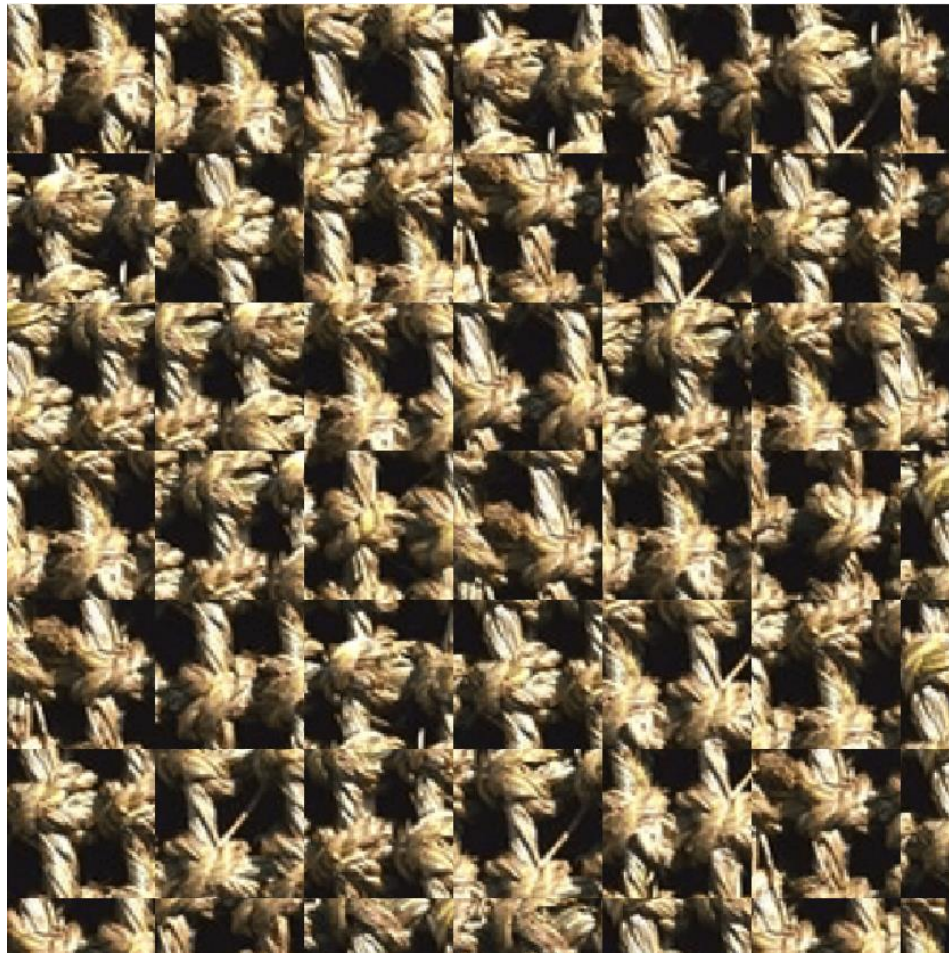
metodaSinteza = 'frontieraMinima'



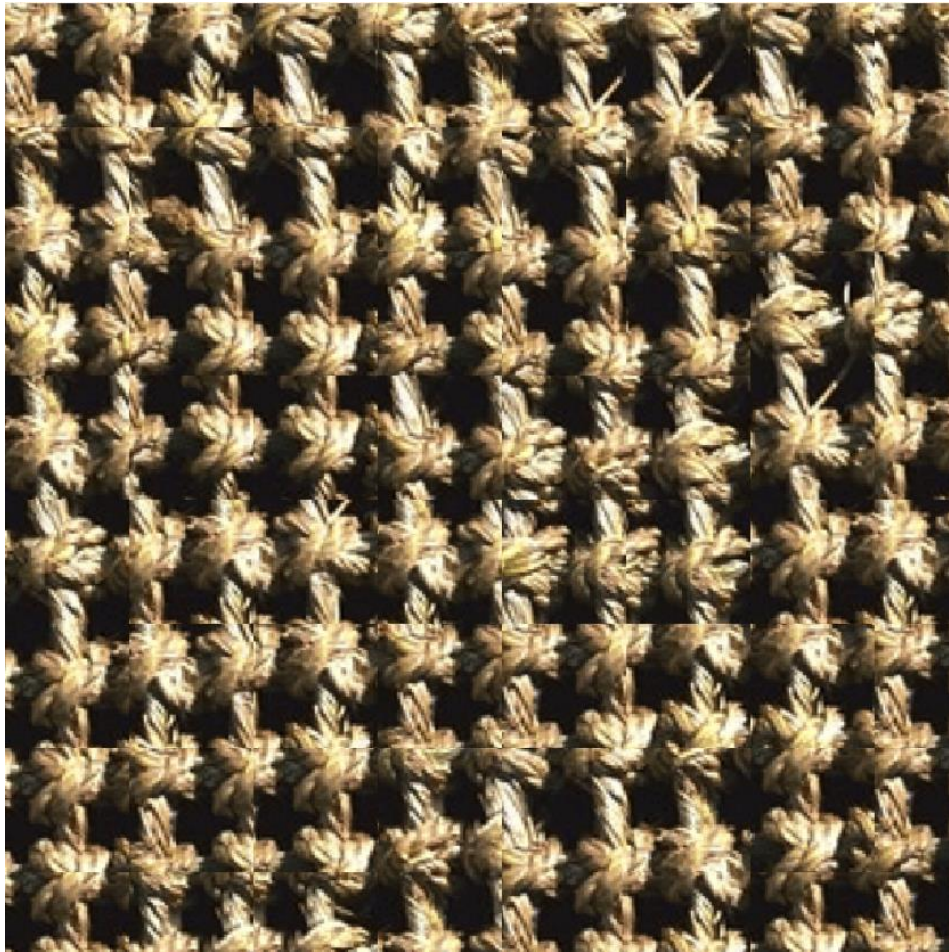
Exemplul 4



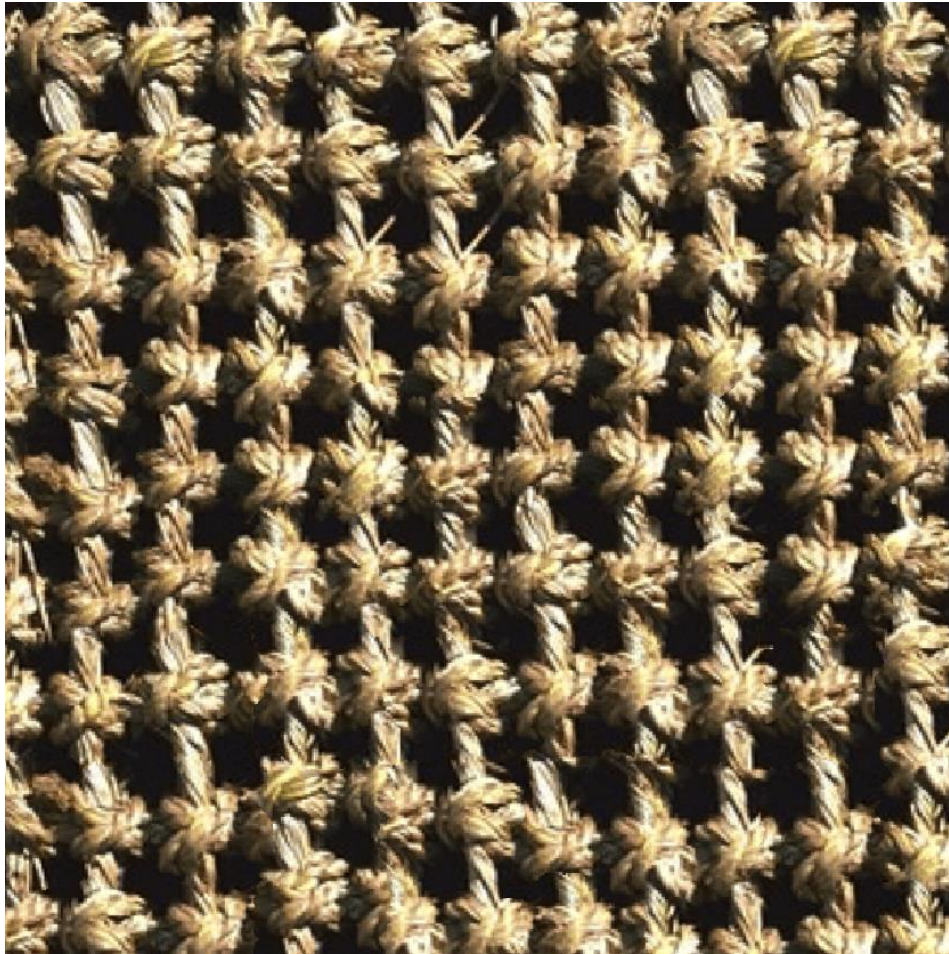
metodaSinteza = 'blocuriAleatoare'



metodaSinteza = 'eroareSuprapunere'



metodaSinteza = 'frontieraMinima'



Exemplul 5

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metodaSinteza = 'blocuriAleatoare'

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metodaSinteza = 'eroareSuprapunere'

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metodaSinteza = 'frontieraMinima'

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(b)

Transfer de textură

Exemplul 1

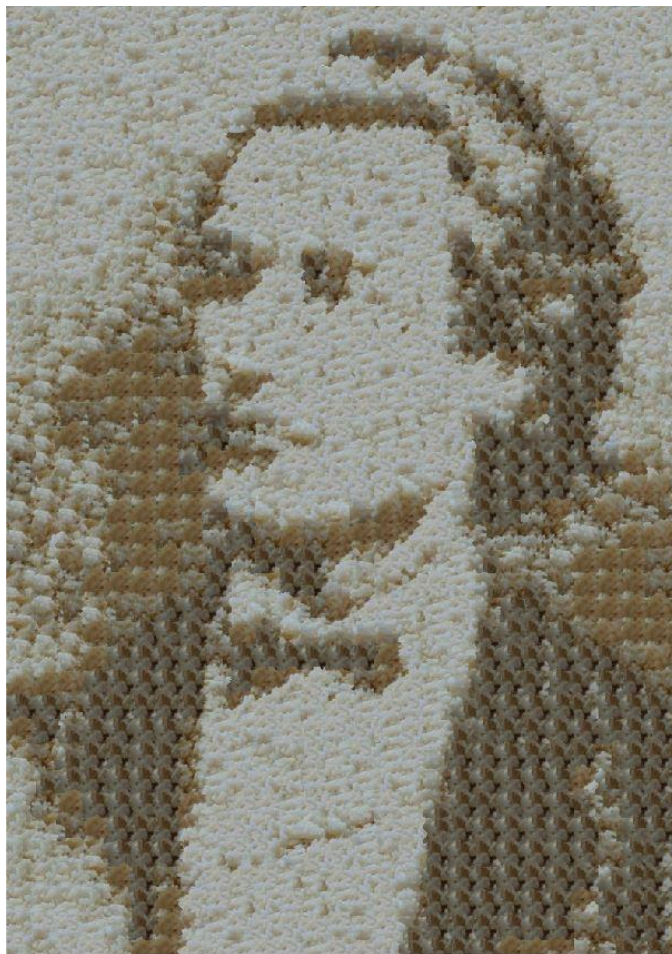


Imagine sursă

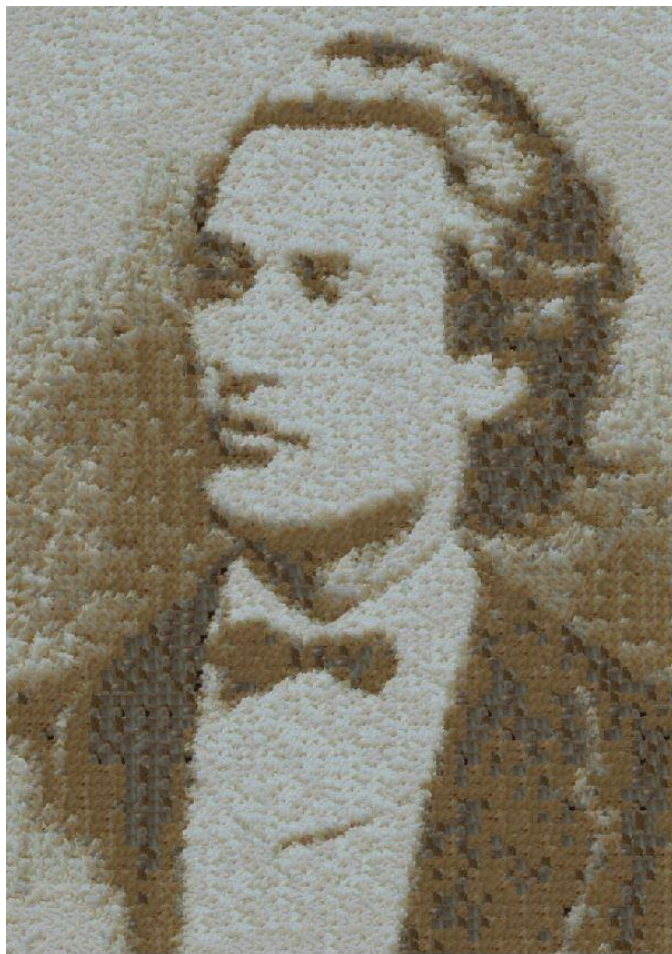


Textură

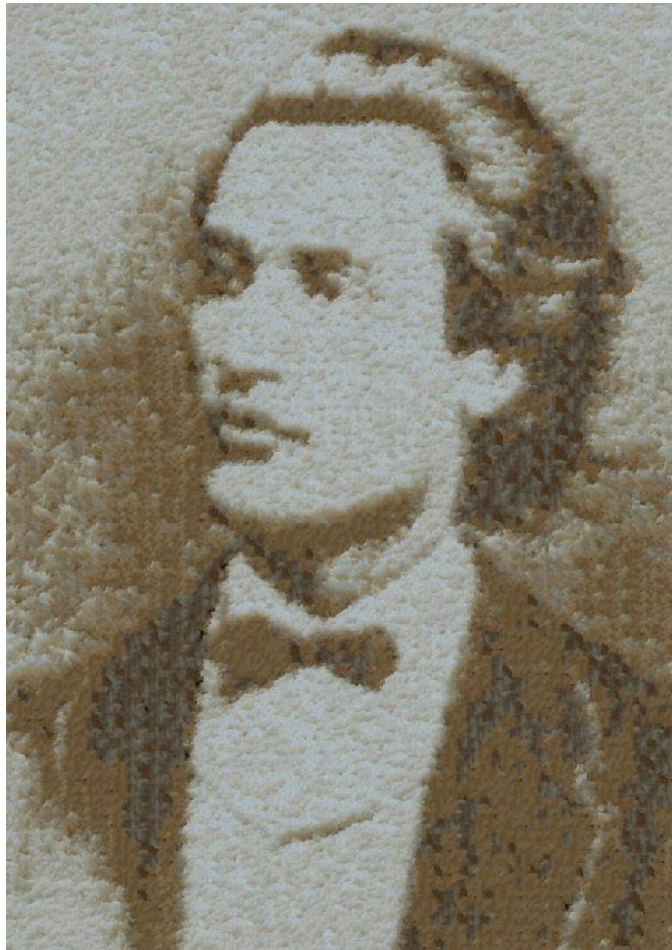
Iterația 1



Iterația 2



Iterația 3



Exemplul 2



Imagine sursă



Textură

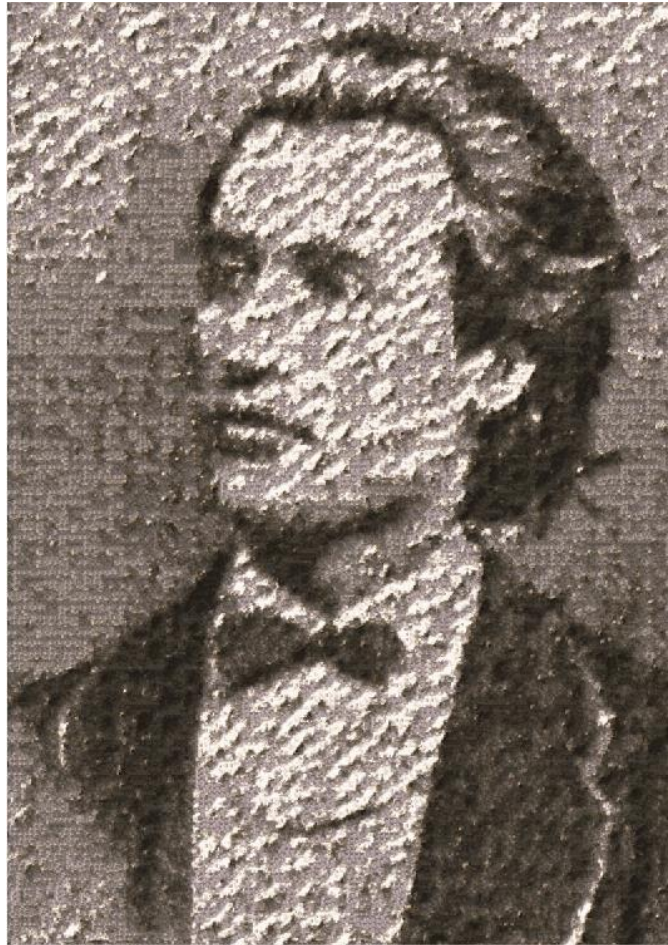
Iterația 1



Iterația 2



Iterația 3



Observații

În urma executării programului pentru diferite texturi, am observat că pentru obținerea unui rezultat satisfăcător trebuie să variăm dimensiunea blocului în funcție de conținutul imaginii inițiale. Astfel, pentru texturile care conțin foarte multă informație importantă (exemplul texturii cu rachita, în care fibrele de lemn trebuie să se îmbine perfect) vom selecta dimensiunea blocurilor să fie destul de mare (96), în timp ce, pentru texturile inițiale care nu au nevoie de o precizie foarte mare la imbinare, putem selecta blocuri de dimensiune mai mică (36).