Vortex Island Estimation of Distribution Algorithm++PRO

CEC/GECCO 2024: Competition on Evolutionary Computation in the Energy Domain: Optimal PV System Allocation

Dr. Yoan Martínez-López, Camagüey University, Cuba

Dr. Julio Madera Quintana, Camagüey University, Cuba
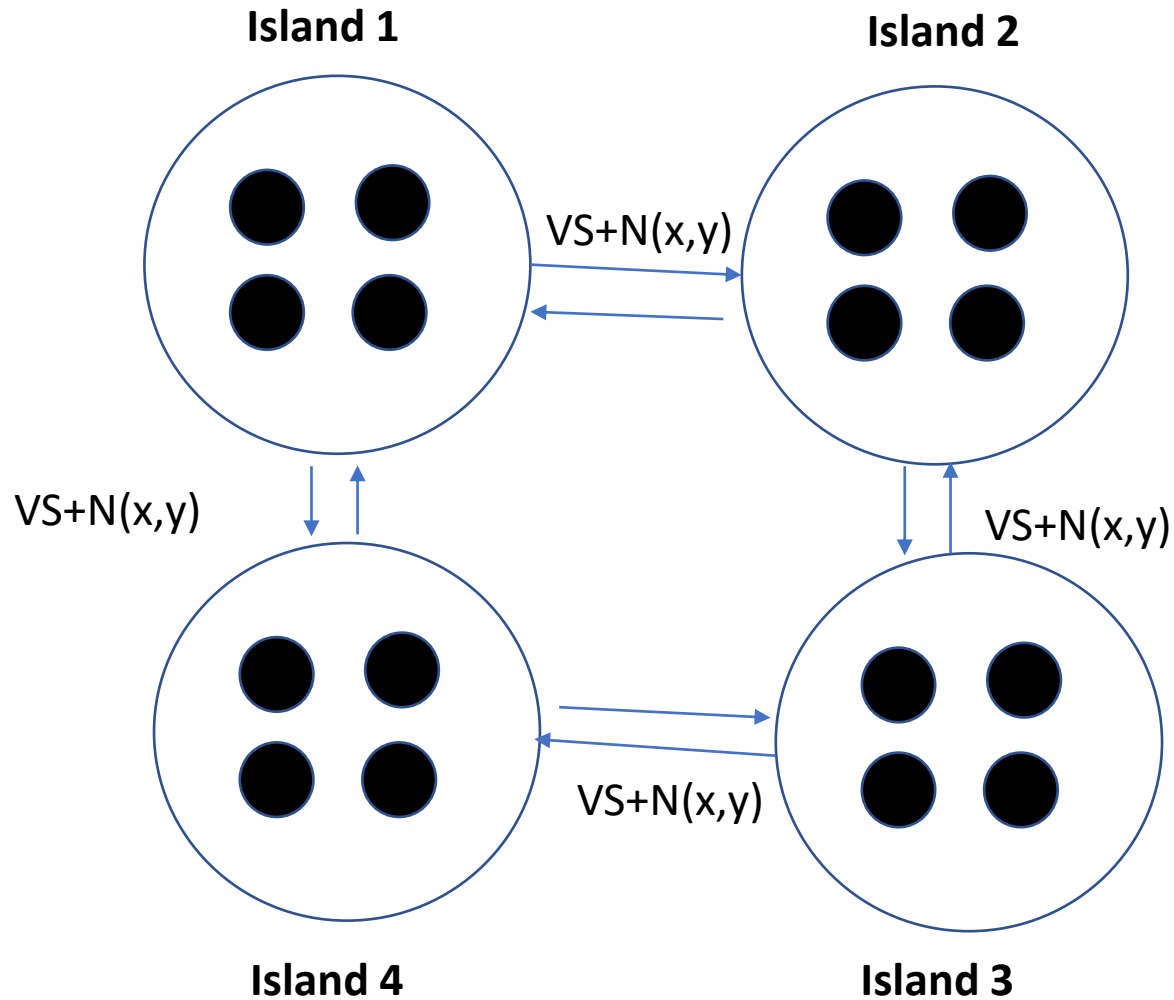
Dr. Ansel Rodríguez-González, CICESE-UT3, México

Eng. Miguel Bethencourt Mayedo, Camagüey University, Cuba

Email: yoan.marttinez@reduc.edu.cu, ymlopez2022@gmail.com

2024

VIEDA++Pro

Island 1 **Island 2**

VS+N(x,y)

VS+N(x,y)

VS+N(x,y)

VS+N(x,y)

Island 4 **Island 3**

Pseudocode

Generate N individuals randomly
For all Island do
   Select Locally K<N individuals
   Estimate K individuals using Normal distribution
   Generate the size(Island) individuals according the Vortex Search
   Apply Big Bang-Big Crunch
   Apply local optimiser, BHC(Beta Hill-Climbing)
   Insert the generated individuals in auxiliary population
 end For
Replace the current Island with the auxiliary population
Swap the best individual between Island(i) and worst individual of Island(i-1)
Compute and **Update** the statistics

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