```
1: procedure ComputeECDF
2:     Initialize A_{i,j} ← 0, for 0 ≤ i, j, ≤ N_A
3:     Initialize B_{i,j} ← 0, for 0 ≤ i, j, ≤ N_A
4:     for i = 1 to N do
5:         AtomRank_x ← ⌈N_A/N · rank(x_i)⌉
6:         AtomRank_y ← ⌈N_A/N · rank(y_i)⌉
7:         B_{AtomRank_x, AtomRank_y} ← B_{AtomRank_x, AtomRank_y} + 1
8:     for s = 0 to N_A do
9:         for r = 0 to N_A do
10:            A_{r,s} ← B_{r,s−1} + B_{r−1,s} − B_{r−1,s−1} + B_{r,s}
11:            B_{r,s} ← A_{r,s}
```