C# Evolutionary Hill Climber Graph Coloring Problem Solver ©
September 29, 2023, by James Pate Williams, Jr.

This application is a modification of a September 14, 2016, program of mine. Artificial neural networks, genetic algorithms, and evolutionary hill climbers were part of my Master of Software Engineering Research Work back from 1998 to 2000 at Auburn University under the guidance of Professor Gerry V. Dozier. My research was applied to NP-Complete constraint satisfaction problems such as the graph coloring problem and the N-Queens puzzle. NP-Complete problems can not be solved by deterministic polynomial time algorithms.

Below are some instances of my recent C# evolutionary hill climber applied to the Graph Coloring Problem (email me at jamespate@mac.com if you want to purchase a license to the application):

| 7 | # Vertices | 12 | # Edges | 7 | # Colors | 1 | PRNG Seed | Solve |