

Evolution

- A distributed search for most effective machine in current environment
- environment varies over time and space
- machine is decomposable
- Superior machine "parts" are distributed over population at exponential rate
- machine population is many and distributed over environment
- machine sub components are hierarchically structured such that recombination works
- Limits exist on machine complexity and environment complexity -- searches above 100 bits can't be converged
- Search is highly efficient in response to high cost of info exchange and trials
- Selective recombination searches different combinations of sub components
 - SR introduces same mutation in ^{sub} components at the cut point below the level of hierarchy. mutation is similar
- Maximal trial of sub components