Evolutionary Computation Theory and Application (ECTA) – Assessment 3: CMA-ES Rastrigin Benchmark

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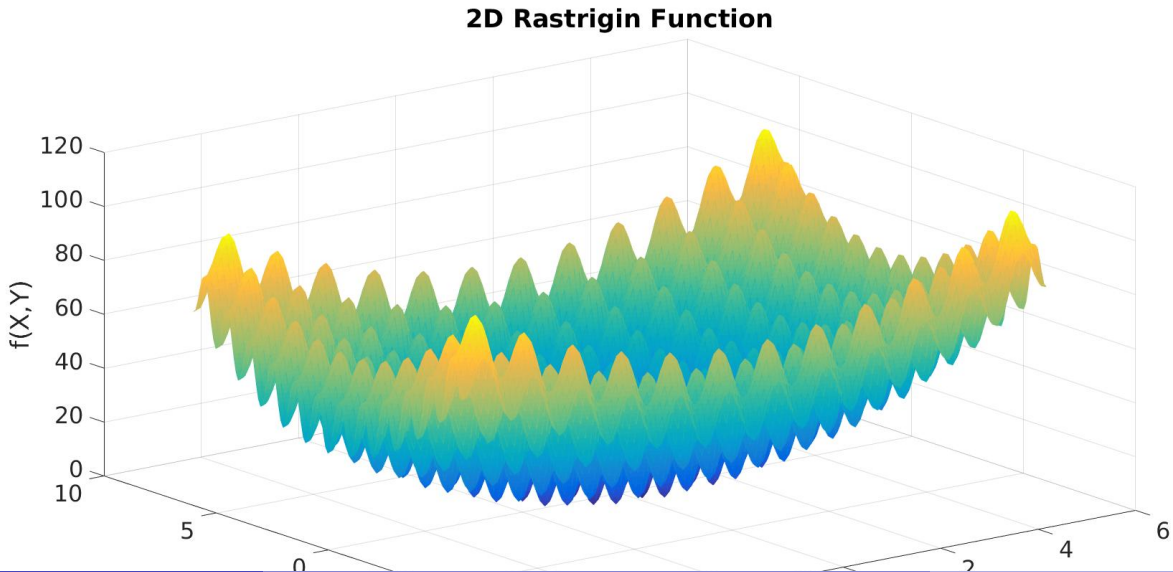
Assessment 3: CMA-ES Rastrigin Benchmark

Find minima of provided Rastrigin benchmark function

- Apply your CMA-ES code to find minima of the 2, 10 and 50 dimensional Rastrigin function. So three experiments.
  - Repeat your experiments at least 5 times. If you find out you run into time problems because your version of CMA-ES is not fast enough, please let us know.
  - Input values commonly range from -6 to 6
  - The global minimum is always at **[0,...,0]**
- The rastr.m file provides the nD rastrigin function. Example.m contains a usage example for n=2



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Submit to LEA:

- Code (all .m files)
- Describe the differences you found in both the optimization result as well as the time to convergence
- PDF,
  - Including plots of elite value over generations
  - Plot **min/mean/max** per set of experiments.
  - Coordinates and value of best/mean/worst minima found
  - Label your axes