

Stat 243 Project

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Project Approach: In order to effectively create a Genetic Algorithm based optimizer to solve variable selection problems for Generalized Linear Models and Linear Models, we would need to meet the following basic requirements:

1. initial randomization to create a population of sample size N (initRandomize)
2. an evaluation function which will evaluate the different individuals/models using the AIC as the objective criterion/fitness
3. main code which carries out the heuristic-based optimization (generic algorithm) to optimize towards the minimum value (select.R)
4. test code which contains all test cases (test.R)

Assignments

1. initial randomization (Kevin: Done with first iteration; Joy: Check and improve)
2. EvalFunction (Joy: First Iteration)
3. select/genalg (Greta: First Iteration in process; Kevin: Second Iteration)
4. Test code (Everyone: Write individual unit testing code and we will write the benchmarking test case together)