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Evolutionary Computation  
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Summary:

- a. Evolutionary computation is trying to figure out a better solution on artificial designing. The question is how does it work?
- b. The inspiration of evolution comes from biology. Darwin's theory of evolution offers an explanation of the biological diversity and its underlying mechanisms. The basic idea is that a population select parents and crossover the gene (keys). Mutate and evaluate a new generation that have better fitness in that environment, known as the survival of the fitness.
- c. Followed with the concept of biology evolutionary, if we have bunch of solutions, and we want get the best one, then we should choose several good solutions from the population. Crossover good subsets from both of the parents. Once we get a better solution, which is still not the best. As like the example during the talk about decoding the text, it took over 10 thousands selection & reproduction to evaluate the best key.
- d. In short, evolutionary computation is a powerful tool for adaptation and optimization by picking useful subsets for the designs. It would help develop a better future and make life easy.

Advice:

Personally, I would like to hear some more examples that shows how evolutionary algorithm to solve the design problems, like Boeing flight, robots.

And I do enjoy the talk, as I am taking evolutionary computation this semester, I got more information and examples than what I learned from class in a short time. Great!