Dear Professor Chen:

Enclosed is a paper, entitled “Genetic Algorithms as a Polynomial Time Alternative for Exponentially Complex Engineering and Business Problems.” Please accept it as a candidate for publication in the *International Journal of Management and Decision Making*. Below are our responses to your submission requirements. By the way, we hope that you can add two possible reviewers from the Management Information Systems community. We have provided one from computer science and one from structural engineering. Here are answers to questions from the author’s guidelines:

1. *Title and the central theme of the article.*

Paper title: "Genetic Algorithms as a Polynomial Time Alternative for Exponentially Complex Engineering and Business Problems." This study introduces genetic algorithms, and shows how the authors have applied them to complex structural engineering problems. It uses the traveling salesperson problem as an example of a generic problem found in business and manufacturing settings. It does an analysis of the problem and demonstrates the use of a genetic algorithm of the authors’ design to find a near-optimal solution.
2. Which subject/theme of the Journal the material fits

The genetic algorithm is particularly well-suited for optimization problems. These can be reformulated as decision problems: does a route through a collection of cities exist that costs no more than some specified amount? Since we show that the tools we use to solve problems in structural engineering can be easily used to solve common business problems, we think there is a broad audience for our work.

3. Why the material is important in its field and why the material should be published in International Journal of Management and Decision Making?

Genetic Algorithms are one of a number of AI techniques based on the only systems that we know that have developed intelligence—natural systems. Classic AI, for all its strengths, often succumbs to combinatorial explosion when confronted with complex problems drawn from the real world. GA have proven to be quite useful in many kinds of decision problems. We hope that our paper, written for an audience not already familiar with GA, will stimulate research in areas where they have not yet been applied.

Names, addresses, and email addresses of two expert referees.

Professor Janice Chambers  
Dept. of Civil and Environmental Engineering  
122 South Central Campus Drive, 114 EMRO  
University of Utah  
Salt Lake City, Utah 84112-0561  
Relationship: Master’s thesis advisor of the husband of one of the authors

Professor Atsushi Inouye  
Department of Computer Science  
CSB 202  
Eastern Washington University  
Cheney, WA 99204  
Relationship: Member of the local ACM. The author’s have heard Professor Inouye speak about artificial intelligence.

Thanks for considering our work. If there is anything else we can provide, please let me know.

Sincerely,

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