For immediate release

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CONCORDE TSP SOLVER solves multi-city Traveling Salesman Problems (TSP) in minutes

http://itunes.apple.com/us/app/concorde-tsp/id498366515

William Cook, author of In Pursuit of the Traveling Salesman, **launches _free_ companion app.**

Twenty-four years ago a 2,392-city example of the TSP was solved in a 23-hour run on a super computer to set a new world record. This same problem now solves in 7 minutes on an iPhone 4!

The Traveling Salesman Problem (TSP) is quite literally a million dollar question. The basic formulation of this math problem is to calculate the shortest possible route to any number of cities and return to the point of origin.

It may be surprising to learn that this apparently simple problem has remained unsolved for centuries. With the development of computing in the 20th century, it seemed as though the solution to the TSP would now be found using computer programming, but the actuality is that this problem is simply too large for any single computer to run through all possible iterations of a tour. In 2006, a real breakthrough came when mathematicians found the optimal solution for an 85,900-city challenge—but this solution relied on the equivalent of 136 years of computer time and cannot accommodate the inclusion of even a single additional city.

Now with the development of **CONCORDE TSP SOLVER**, mathematicians and students have, at their fingertips, a program capable of solving the TSP for a large range of cities in minutes.

Concorde TSP Solver

Price: FREE

Requirements: Compatible with iPhone 3GS, iPhone 4, iPhone 4S, iPod touch (3rd generation), iPod touch (4th generation) and iPad.Requires iOS 5.0 or later.

Reviews

@CompSciFact (2/5/12)
"We have an embarrassment of computational riches when we can solve traveling salesmen problems on a phone."

@misterbrash (2/5/12)
"This unravels my University degree and hurts my brain! Solve traveling salesman problem(s) on your iPhone. In seconds."

@ehtayer (2/5/12)
"Computational life is lush: traveling salesman app."

@miketrick (2/4/11)
"Touring lots of cities? There's an app for that! Amazing work by @wjcook and gang."

The **CONCORDE TSP SOLVER** app is a powerful display of the potential to solve on mobile devices large examples of even the most difficult computational problems. This makes it an ideal tool for understanding and teaching the mathematics behind the most successful line-of-attack on the salesman problem. The colorful graphics show step-by-step how a tool called linear programming zeros in on the optimal route to visit a displayed collection of cities.

CONCORDE TSP SOLVER is a great companion to Cook's book **IN PURSUIT OF THE TRAVELING SALESMAN: Mathematics at the Limits of Computation.**

William J. Cook is the Chandler Family Chair and Professor in Industrial and Systems Engineering at Georgia Institute of Technology. He is the coauthor of The Traveling Salesman Problem: A Computational Study (Princeton). He is on twitter at @wjcook.

About IN PURSUIT OF THE TRAVELING SALESMAN:
http://press.princeton.edu/titles/9531.html

William Cook takes readers on a mathematical excursion, picking up the salesman's trail in the 1800s when Irish mathematician W. R. Hamilton first defined the problem, and venturing to the furthest limits of today's state-of-the-art attempts to solve it. **IN PURSUIT OF THE TRAVELING SALESMAN** travels to the very threshold of our understanding about the nature of complexity, and challenges you yourself to discover the solution to this captivating mathematical problem.

"Fascinating . . . describes the history, personalities, challenges, applications and techniques used to find solutions of the famous 'Traveling Salesman Problem' and related problems."
—Pradeep Mutalik, Wordplay blog at *New York Times*

"Reading the book looks like an exciting adventure, with the itinerary mapped for the reader by a master story-teller whose work squarely places him in the forefront of the TSP research."
—Alexander Bogomolny, Cut the Knot Insights blog

"Bill takes his readers down a beautiful path covering the history, applications, and algorithms associated with the TSP. It is a fascinating story, and one that shows a researcher who truly loves his research area. . . . Through this book, you'll learn all about the Traveling Salesman Problem and, more broadly, about the different research directions in combinatorial optimization."
—Michael Trick's Operations Research Blog

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