ECE 457A - Tutorial 5 - TSP

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Traveling Salesman Problem (TSP)

- A widely studied combinatorial optimization problem
- **Problem:**
  - **Given a set of cities and a cost to travel from one city to another, identify the tour that will allow a salesman to visit each city only once, starting and ending in the same city, at the minimum cost!**
- NP-Complete
  - Nondeterministic Polynomial-time Complete
  - No known polynomial-time algorithm can solve them
- Polynomial Time:
  https://mathworld.wolfram.com/PolynomialTime.html

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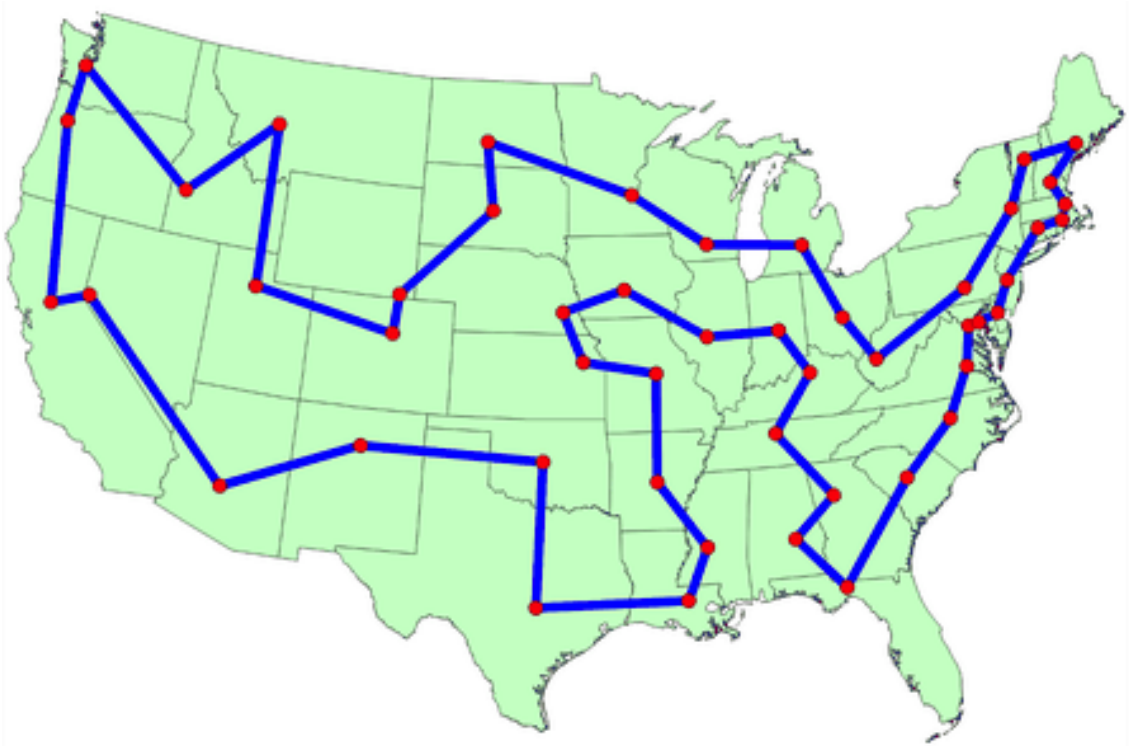

Figure: Solution to 48 States Traveling Salesman Problem

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References

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