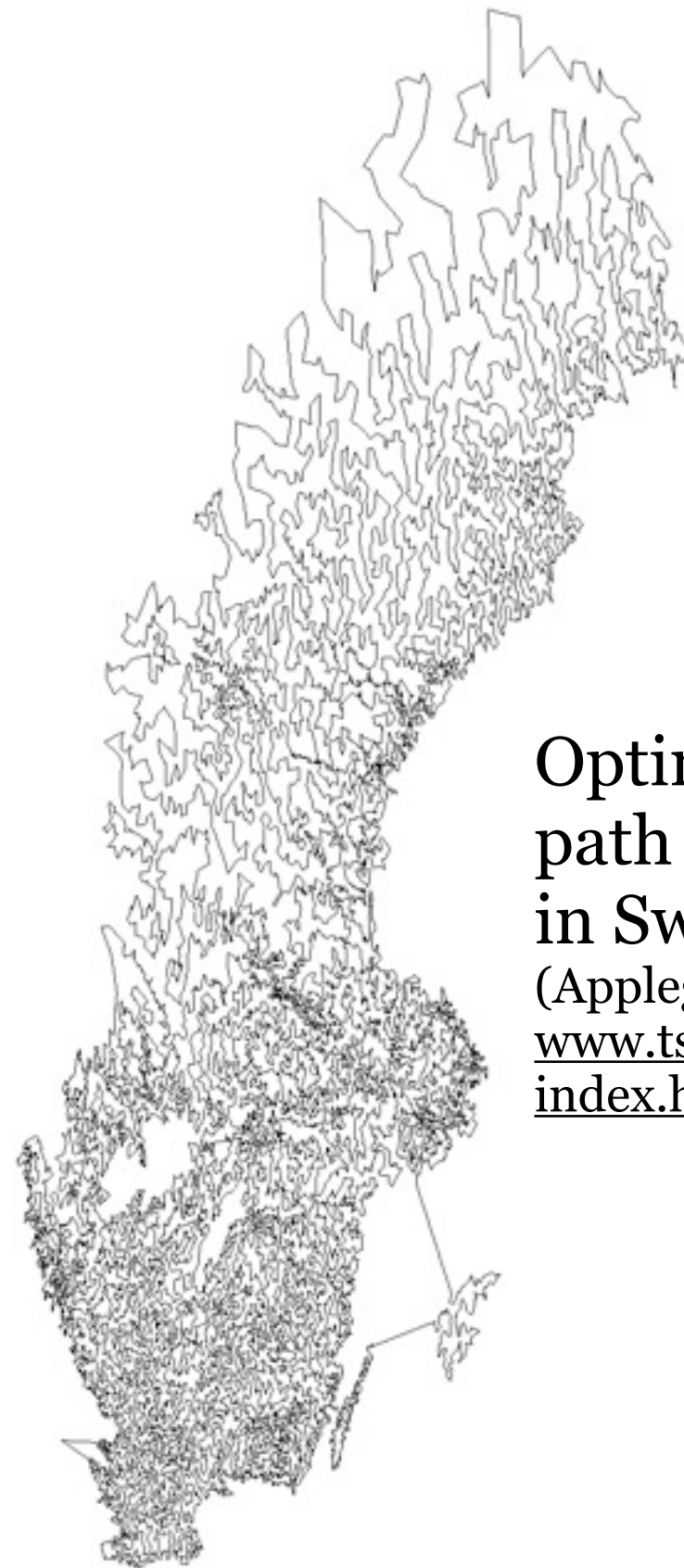


Hamiltonian Path

- Motivation: Every read must be used in exactly one place in the genome.
- Hamiltonian Path is NP-hard.
- Though good solvers exist, they can't operate on the millions of reads from a sequencing project.
- Solution: greedy walk along the graph.



Optimal Hamiltonian path of 24,978 cities in Sweden

(Applegate et al, 2004, www.tsp.gatech.edu/sweden/index.html).