Content warning: this talk will contain Hamiltonian cycles.

THE TRIVIAL NOTIONS SEMINAR

Jenny Kaufmann

will speak on

ALGORITHMSHORTESTCOMMONSUPERSTRINGREEDYFORAPPROXIMATING

ABSTRACT

In the shortest common superstring (SCS) problem, we are given a list of strings $s_1, \ldots, s_n$ and asked to find the shortest string containing every s_i as a substring. This is hard, as in NP-hard, so if we want to do this efficiently, we can settle for just finding a common superstring which is pretty short. It turns out that there are some greedy algorithms which do pretty well at approximating SCS via constructing cycle covers of a graph representation of the problem.

Thursday, October 28, 2021
at 11:30 am
Jefferson Tent