1135-F1-1732  Robert Bosch* (rbosch@oberlin.edu). 3D printed tours. Preliminary report.

TSP Art involves converting a grayscale target image into a collection of points, treating the points as the cities of a Traveling Salesman Problem (TSP), and then finding a high quality tour (Hamiltonian cycle) that passes through them. If all goes well, the salesman’s tour will be a continuous line drawing that resembles the target image. In this talk, I will discuss my ongoing experiments in incorporating 3D printing into TSP Art and other tour-based artwork. My goal is to use the technology to create sculptures that pull the viewer into the artwork, make discoveries about it, or see something in a new light. (Received September 24, 2017)