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*Opt Art*

Optimization is concerned with optimal performance – finding the best way to complete a task. It has been put to good use in a great number of diverse disciplines: advertising, agriculture, biology, business, economics, engineering, manufacturing, medicine, telecommunications, and transportation (to name but a few). In this lecture, we will showcase its amazing utility by demonstrating its applicability in the area of visual art, which at first glance would seem to have no use for it whatsoever! We will begin by describing how to use integer programming to construct a portrait out of complete sets of double nine dominoes. We will then describe how high quality solutions to certain large-scale traveling salesman problems can lead to beautiful continuous line drawings. We will conclude by presenting other examples of Opt Art – art constructed with the assistance of optimization techniques.