On Clustering (through Medians)
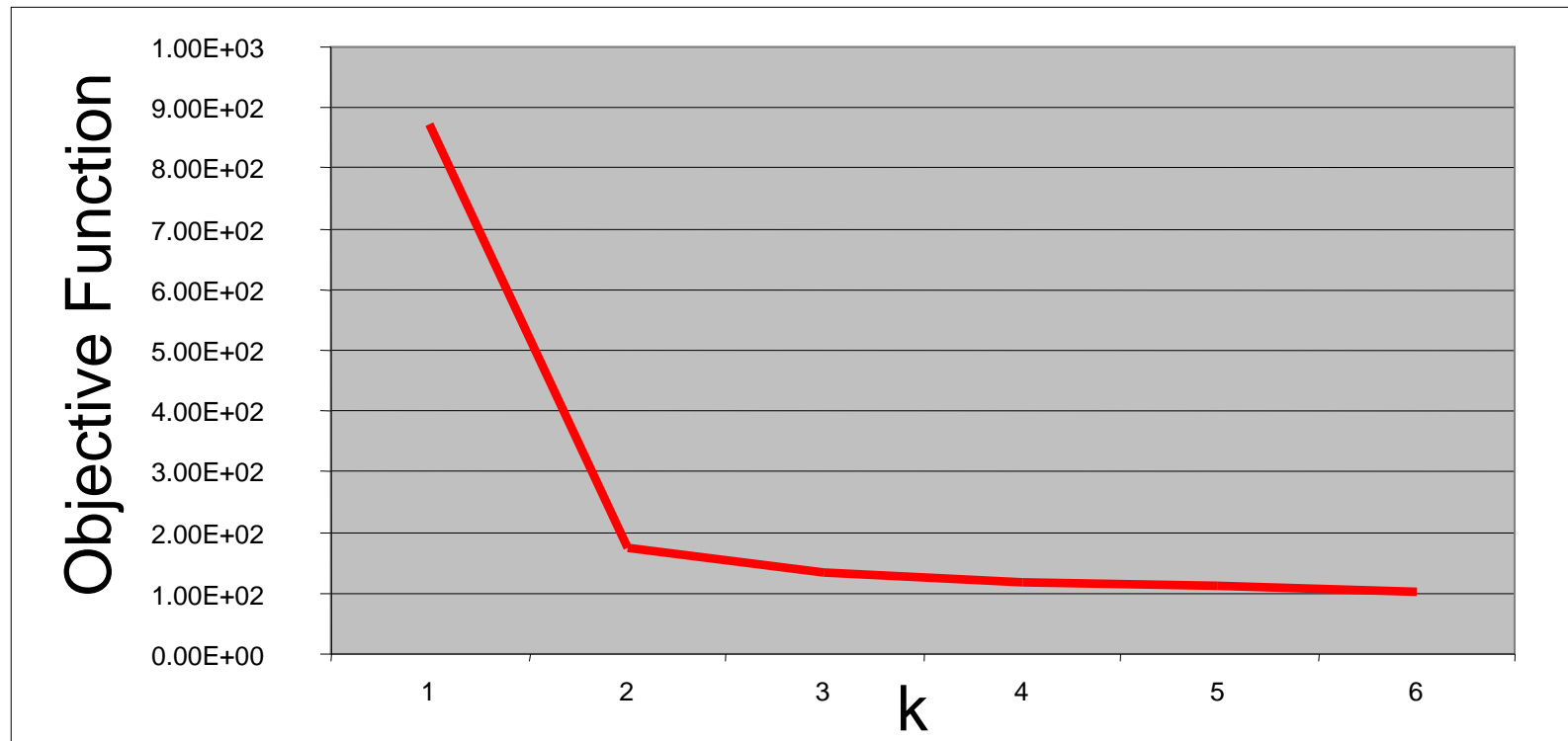
Alexander G. Ororbia II

Introduction to Machine Learning

CSCI-635

11/6/2023

White board time! Developing
the K-medoids algorithm

WHITE BOARD TIME!

The Elbow Method

- To determine K, plot K-means/medoids objective function values for $K = 1, 2.,..,K_{max}$

- Abrupt change at $K = 2$ (plot below) = highly suggestive of two clusters in data; Determining number of clusters also known as "*knee finding*" or "*elbow finding*"

- Other approaches might work better, e.g., Silhouette score, etc.

QUESTIONS?