Big data is data that is so big that it can't fit in the main memory of a single machine. In an Internet search, network traffic monitoring, machine learning, scientific computing, signal processing, and other areas, it is necessary to process big data with efficient algorithms.
This course will talk about mathematically sound models for making these kinds of algorithms, as well as the limits that can be shown for algorithms that work in those models.
Data structures that take up very little space and can be changed on the fly in a fast-moving stream of input. Algorithms and data structures that make I/Os as small as possible for data that doesn't fit in memory but does fit on one disk.

CS 229R: Algorithms for Big Data. Algorithms for Big Data (CS 229r). (n.d.). Retrieved March 27, 2023, from https://people.seas.harvard.edu/~minilek/cs229r/fall15/index.html