



5 Courses

Algorithms for Searching,
Sorting, and Indexing

Trees and Graphs: Basics

Dynamic Programming,
Greedy Algorithms

Approximation Algorithms
and Linear Programming

Advanced Data Structures,
RSA and Quantum
Algorithms



University
of Colorado
Boulder

Mar 30, 2025

Jamie Barbour-Moore

has successfully completed the online, non-credit Specialization

Foundations of Data Structures and Algorithms

Building fast and highly performant data science applications requires an intimate knowledge of how data can be organized in a computer and how to efficiently perform operations such as sorting, searching, and indexing. This specialization guides learners through the fundamentals of data structures and algorithms with a focus on data science applications. It is targeted towards learners who are broadly interested in programming applications that process large amounts of data (expertise in data science is not required), and are familiar with the basics of programming in python.

Sriram
Sankaranarayanan, PhD
Professor of Computer
Science
University of Colorado
Boulder

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