Mindluster Platform

About the course Design and analysis of algorithms

Course Presenter : Trouble Free

Enhance your understanding of core computer science principles with our comprehensive online course on Design and Analysis of Algorithms. This training course is specifically designed to equip learners with the essential skills needed to solve complex computational problems efficiently. Whether you are a student, a professional seeking to advance your career, or an enthusiast aiming to deepen your knowledge in computer science, this course offers valuable insights to elevate your expertise. Throughout this course, you will learn how to develop, analyze, and optimize algorithms for a variety of applications. Gain practical skills in algorithm design techniques, complexity analysis, and problem-solving strategies that are critical in today's technology-driven world. The course covers fundamental topics such as sorting and searching algorithms, graph algorithms, dynamic programming, and advanced computational concepts. By the end of this training, you'll be able to assess algorithm efficiency and apply best practices to real-world challenges. This course is ideal for computer science students, software developers, data analysts, and IT professionals who want to strengthen their professional skills. It provides a solid foundation for those interested in pursuing careers in software engineering, data science, or research and development within the Middle East, including Saudi Arabia and the UAE, where technological innovation is rapidly expanding. Choosing this online platform ensures flexible learning tailored to your schedule. Our certified course offers a recognized certificate of completion, validating your skills and enhancing your professional profile. The training is designed to be engaging and practical, with real-world examples and assessments to reinforce learning. Upon completing this course, you'll be well-positioned for career growth in various tech-driven roles. Opportunities include software developer, algorithm engineer, data scientist, or research analyst, among others. The certification you earn can open doors to new job prospects and career advancement in the competitive Middle East and beyond. Enroll in this Certified Course today to develop your computer science skills, achieve your professional goals, and stay ahead in the fast-evolving technology landscape. Trouble Free

Computer Science Category's Courses

Course Lesson(37)

Lesson 1 : **1 Algorithms Introduction Performance Analysis DAA**

Lesson 2 :
2 Time Complexity Of Algorithms with Example Best Worst Average Case Time Complexities DAA

Lesson 3 : **3 Space Complexity Of Algorithms with Example Calculating Space Complexity DAA**

Lesson 4 : **4 Asymptotic Notations Big Oh Omega Theta Little Oh Notation DAA**

Lesson 5 : **Divide and Conquer Algorithm General Method Lec 5 DAA**

Lesson 6 : **Binary Search Algorithm Concept Code Example Time Complexity L 6 DAA**

Lesson 7 : **Quick Sort Algorithm Concept Code Example Time Complexity L 7 DAA**

Lesson 8 : **Merge Sort Algorithm Concept Code Example Time Complexity L 8 DAA**

Lesson 9 : **Strassen s Matrix Multiplication Concept Algorithm Time Complexity L 9 DAA**

Lesson 10 : **Disjoint Set Operations Simple Union Find Algorithms L 10 DAA**

Lesson 11 : **Back Tracking General Method Example Applications L 11 DAA**

Lesson 12 : **N Queens Problem in Back Tracking Method Example L 12 DAA**

Lesson 13 : **Sum Of Subsets Problem in Back Tracking Method Example L 13 DAA**

Lesson 14 : **Graph Coloring Problem in Back Tracking Method Example L 14 DAA**

Lesson 15 : **Dynamic Programming General Method Example Applications L 15 DAA**

Lesson 16 :
Optimal Binary Search Tree Algorithm with Example using Dynamic Programming Part 1 L 16 DAA

Lesson 17 :
Optimal Binary Search Tree Algorithm with Example using Dynamic Programming Part 2 L 17 DAA

Lesson 18 : **0 1 Knapsack Algorithm with Example using Dynamic Programming L 18 DAA**

Lesson 19 :
All Pairs Shortest Path Algorithm with Example using Dynamic Programming Part 1 L 19 DAA

Lesson 20 :
All Pairs Shortest Path Algorithm with Example using Dynamic Programming Part 2 L 20 DAA

Lesson 21 : **Travelling Salesperson Problem with Example using Dynamic Programming L 21 DAA**

Lesson 22 : **Reliability Design with Example using Dynamic Programming L 22 DAA**

Lesson 23 : **Greedy Method General Method Example Applications L 23 DAA**

Lesson 24 : **Job Sequencing with Deadlines with Example using Greedy Method L 24 DAA**

Lesson 25 : **Knapsack Problem with Example using Greedy Method L 25 DAA**

Lesson 26 : **Minimum Cost Spanning Tree with Example using Greedy Method L 25 DAA**

Lesson 27 : **Single Source Shortest Path Problem with Example using Greedy Method L 25 DAA**

Lesson 28 : **Tree Traversal Techniques Inorder Preorder and Postorder with Example L 26 DAA**

Lesson 29 :
Graph Traversal Techniques Depth First Search and Breadth First Search with Example L 27 DAA

Lesson 30 : **Branch and Bound Method Example Applications DAA**

Lesson 31 : **Travelling Sales Person Branch Bound with Example Part 1 DAA**

Lesson 32 : **Travelling Sales Person Branch Bound with Example Part 2 DAA**

Lesson 33 : **0 1 Knapsack with Least Cost Branch Bound with Example Part 1 DAA**

Lesson 34 : **0 1 Knapsack with Least Cost Branch Bound with Example Part 2 DAA**

Lesson 35 : **0 1 Knapsack with FIFO Branch Bound with Example Part 1 DAA**

Lesson 36 : **0 1 Knapsack with FIFO Branch Bound with Example Part 2 DAA**

Lesson 37 : **NP Hard and NP Complete Problems Non Deterministic Algorithms DAA**

Related courses

Linear Algebra for Computer Scientists

Insertion Sort

Bubble Sort

GCSE Computer Science

Random Access Memory

Binary Trees



for Business Contact
business@mindluster.com