

Fundamental Problems In Computing

[DOWNLOAD HERE](#)

1;Foreword;6 2;Preface and Introduction;7 3;References;16 4;Selected Reprints from Professor Rosenkrantz's Seminal Contributions;21 4.1;Matrix Equations and Normal Forms for Context-Free Grammars;22 4.1.1;Preliminaries ;22 4.1.2;Systems of Equations ;23 4.1.3;Regular Expressions and the Closure of a Matrix ;24 4.1.4;Normal Form with Terminal Production Heads ;25 4.1.5;Normal Form with Terminal Heads and Tails ;28 4.1.6;References;29 4.2;Attributed Translations;30 4.2.1;Introduction ;30 4.2.2;Translation Grammars ;32 4.2.3;Attributed Translations ;33 4.2.4;Attributed Translation Grammars ;33 4.2.5;Examples ;36 4.2.6;Attributed Pushdown Machines ;43 4.2.7;Performing Translations Nondeterministically ;45 4.2.8;Performing Translations Deterministically ;51 4.2.9;Performing Arbitrary Translations ;57 4.2.10;Summary ;58 4.2.11;References;59 4.3;An analysis of several heuristics for the traveling salesman problem;60 4.3.1;Introduction ;61 4.3.2;Nearest Neighbor Algorithm ;62 4.3.3;Insertion Methods ;69 4.3.4;Nearest Insertion and Cheapest Insertion ;72 4.3.5;Farthest Insert ;77 4.3.6;Some Other Approximation Methods ;78 4.3.7;k-Optimality ;80 4.3.8;References;83 4.4;System Level Concurrency Control for Distributed Database Systems;84 4.4.1;Introduction ;85 4.4.2;Consistency ;87 4.4.3;Process Termination and Abortion ;88 4.4.4;Linearizing Concurrency Controls ;89 4.4.5;Conflicts ;90 4.4.6;Strict Concurrency Controls ;91 4.4.7;Responses to Conflicts ;94 4.4.8;Waiting Forever ;95 4.4.9;Fixed Order Concurrency Controls ;98 4.4.10;Restarting Forever ;100 4.4.11;The WAIT-DIE System ;101 4.4.12;The Wound-Wait System ;101 4.4.13;Comparison of WAIT-DIE and WOUND-WAIT Systems ;103 4.4.14;Centralized Concurrency Control ;104 4.4.15;Hybrid Concurrency Controls ;105 4.4.16;References;109 4.5;Consistency and serializability in concurrent database systems;111 4.5.1;Introduction ;112 4.5.2;Concurrency Control ;115 4.5.3;Databases ;116 4.5.4;Transactions ;116 4.5.5;Version Graphs ;118 4.5.6;Version Graph Analysis ;120 4.5.7;Datatraces ;123 4.5.8;Main Results ;126 4.5.9;Assuring Consistency ;127 4.5.10;The Converse Result ;129 4.5.11;The Read-Before-Write Assumption ;136 4.5.12;Time Assumptions ;138 4.5.13;Conclusion ;142 4.5.14;References;143 4.6;An efficient method for representing and transmitting message patterns on multiprocessor interconnection networks;145 4.6.1;Introduction ;146 4.6.2;The Omega Network ;149 4.6.3;Definition of a Mask

Formalism ;151 4.6.4;Mask Normal Form ;153 4.6.5;Classes of Message Patterns Representable by (s,d)-Masks ;154 4.6.6;(s,d)-Masks and Detecting Congestion ;156 4.6.6.1;Detecting Conflicts in an (s,d)-Mask ;158 4.6.6.2;Detecting Congestion in an (s,d)-Mask ;162 4.6.7;Minimum Round Partitioning for (s,d)-Masks ;164 4.6.7.1;Minimum Round Partitioning for Non-Broadcast Omega Networks ;165 4.6.7.2;Minimum Round Partitioning for Broadcast Omega Networks ;169 4.6.8;Conclusion ;171 4.6.9;References;172 4.7;Representability of Design Objects by Ancestor-Controlled Hierarchical Specifications;174 4.7.1;Introduction ;175 4.7.2;Basic Definitions and Concepts ;182 4.7.3;Expressive Power of the VDAG Model ;187 4.7.4;VDAG Construction ;191 4.7.5;Stamp Uniqueness Property and the Effect of Bounded Stamp Multiplicity ;198 4.7.6;Construction of Number Functions ;204 4.7.7;Handling Non-VDAG-Generable Forests ;207 4.7.8;Relative Conciseness of VDAG Model ;208 4.7.9;Automatic Simplification ;211 4.7.10;Conclusion ;216 4.7.11;References;217 4.8;The Complexity of Processing Hierarchical Specifications;219 4.8.1;Introduction ;220 4.8.2;Definitions and Terminology of Hierarchical Specifications ;222 4.8.3;Linear Space Simulation of Weakly Acyclic Circuits ;226 4.8.4;Acyclic Circuits: Lower Bounds ;231 4.8.5;2O(n) time Simulation of Acyclic Circuits ;236 4.8.6;Analysis Problems for Circuits with Cycles ;242 4.8.7;References;248 4.9;Approximatio EAN/ISBN : 9781402096884
Publisher(s): Springer Netherlands Discussed keywords: Informatik Format: ePub/PDF Author(s): Ravi, Sekharipuram S. - Shukla, Sandeep Kumar

[DOWNLOAD HERE](#)

Similar manuals:

[Fundamental Problems In Computing](#)