Record Nr. UNINA9910143596703321 Practice and Theory of Automated Timetabling III: Third International **Titolo** Conference, PATAT 2000 Konstanz, Germany, August 16-18, 2000 Selected Papers / / edited by Edmund Burke, Wilhelm Erben Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2001 **ISBN** 3-540-44629-X Edizione [1st ed. 2001.] 1 online resource (XII, 364 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743;; 2079 Collana 658.5/3 Disciplina Soggetti Computer programming Production management Artificial intelligence Algorithms Computer science—Mathematics **Programming Techniques Operations Management** Artificial Intelligence Algorithm Analysis and Problem Complexity Mathematics of Computing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Course and School Timetabling -- A Multiobjective Genetic Algorithm Nota di contenuto for the Class/Teacher Timetabling Problem -- Some Complexity Aspects of Secondary School Timetabling Problems -- A Generic Object-Oriented Constraint-Based Model for University Course Timetabling -- A Co-Evolving Timeslot/Room Assignment Genetic Algorithm Technique for University Timetabling -- A Comprehensive Course Timetabling and Student Scheduling System at the University of Waterloo -- Examination Timetabling -- Examination Timetables and Tabu Search with Longer-Term Memory -- Tabu Search Techniques for Examination Timetabling -- A Multicriteria Approach to Examination Timetabling -- A Grouping Genetic Algorithm for Graph Colouring and

Exam Timetabling -- Employee Timetabling -- Cyclical Staff Scheduling

Using Constraint Logic Programming -- A Hyperheuristic Approach to Scheduling a Sales Summit -- Solving Rostering Tasks as Constraint Optimization -- Assigning Resources to Constrained Activities -- Other Timetabling and Related Problems -- Fleet Scheduling Optimization: A Simulated Annealing Approach -- A Schedule-Then-Break Approach to Sports Timetabling -- Three Methods to Automate the Space Allocation Process in UK Universities -- Practical Considerations and General Issues -- Resource-Constrained Project Scheduling and Timetabling -- Graph Colouring by Maximal Evidence Edge Adding -- Modelling Timetabling Problems with STTL -- A Language for Specifying Complete Timetabling Problems -- A Software Architecture for Timetable Construction -- Other Timetabling Presentations -- Other Timetabling Presentations.

Sommario/riassunto

This volume is the third in an ongoing series of books that deal with the state of the art in timetabling research. It contains a selection of the papers presented at the 3rd International Conference on the Practice and Theory of Automated Timetabling (PATAT 2000) held in Constance, Germany, on August 16{18th, 2000. The conference, once again, brought together researchers, practitioners, and vendors from all over the world working on all aspects of computer-aided timetable generation. The main aim of the PATAT conference series is to serve as an international and inter-disciplinary forum for new timetabling research results and directions. The conference series particularly aims to foster mul- disciplinary timetabling research. Our eld has always attracted scientists from a number of traditional domains including computer science and operational - search and we believe that the cross-fertilisation of ideas from di erent elds and disciplines is a very important factor in the future development of timetabling research. The Constance conference certainly met these aims. As can be seen from the selection of papers in this volume, there was a wide range of interesting approaches and ideas for a variety of timetabling application areas and there were delegates from many di erent disciplines. It is clear that while considerable progress is being made in many areas of timetabling research, there are a number of important issues that researchers still have to face. In a contribution to the previous PATAT conference, George M.