SAUL STAHL

A Gentle Introduction to Game Theory

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The game theory was originally developed as a formal mathematical tool for modelling specific economic and social phenomena for which a conflict of interests is an essential attribute. Anyhow, its mathematical formalism sometimes demands too much from the readers whose education was rather oriented to social and humanitarian sciences.

The referred book aims to bridge over this gap and to offer a lucid overview of basic game theoretical methods with application of elementary mathematics. The topics presented in the book are limited to 2-players games, mostly (except the last three chapters) with zero-sum payments.

The text is divided into 14 not very extensive chapters. After introductory heuristic description and formal basic definitions (Chapters 1 and 2) the next four chapters deal with the concept of optimality of strategies and the solutions concepts. The following five chapters are oriented to some special types of zero-sum two-players games and algorithms for their solution. Finally, the conclusive three chapters deal with nonzero-sum two players games, mixed strategies in such games and their equilibria. The book is completed by the Index and Bibliography.

All topics mentioned in the book are explained in a clear way and illustrated by well chosen examples. Some chapters are completed by exercises whose solutions can be found in the conclusive section. The entire text is designed as a textbook which is optimal for elementary courses of 2-players game theory for students with a simple mathematical background. This purpose is very well fulfilled.

The referred book can be recommended to all readers wishing to find basic and well readable introduction to the relevant topic or for university teachers looking for a sophisticated background for their lectures in the elementary game theory including well motivated examples and exercises.

Milan Mareš