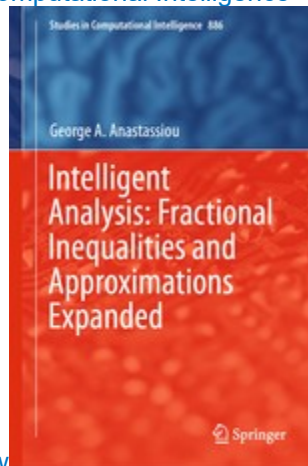


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About this book

This book focuses on computational and fractional analysis, two areas that are very important in their own right, and which are used in a broad variety of real-world applications. We start with the important Iyengar type inequalities and we continue with Choquet integral analytical inequalities, which are involved in major applications in economics. In turn, we address the local fractional derivatives of Riemann–Liouville type and related results including inequalities. We examine the case of low order Riemann–Liouville fractional derivatives and inequalities without initial conditions, together with related approximations. In the next section, we discuss quantitative complex approximation theory by operators and various important complex fractional inequalities. We also cover the conformable fractional approximation of Csiszar's well-known f-divergence, and present conformable fractional self-adjoint operator inequalities. We continue by investigating new local fractional M-derivatives that share all the basic properties of ordinary derivatives. In closing, we discuss the new complex multivariate Taylor formula with integral remainder. Sharing results that can be applied in various areas of pure and applied mathematics, the book offers a valuable resource for researchers and graduate students, and can be used to support seminars in related fields.

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