Books

Harnessing Green IT: Principles and Practices
Edited by: San Murugesan & G. R. Gangadharan.
Published by: John Wiley & Sons, Inc.
Hardcover. Pages: 432.
Price: Rs. 499/=

This book presents a comprehensive coverage of key topics of importance and practical relevance - green technologies, design, standards, maturity models, strategies & adoption and also presents a clear approach to greening IT encompassing green use, green disposal, green design, and green manufacturing. It illustrates how to strategically apply green IT in practice in several areas. It examines various ways of making computing and information systems greener environmentally sustainable -, as well as several means of using Information Technology (IT) as a tool and an enabler to improve the environmental sustainability. The book focuses on both greening of IT and greening by IT complimentary approaches to attaining environmental sustainability. The highlights of the book include: Discussion on several useful approaches to embracing green IT in several areas; Chapters written by accomplished experts from industry and academia who have first-hand knowledge and expertise in specific areas of green IT; Set of review and discussion questions at the end of each chapter that will help the readers to examine and explore the green IT domain further; Inclusion of a companion website providing resources for further information and presentation slides. This book will be an excellent resource for IT Professionals, academics, students, researchers, project leaders/managers, IT business executives, CIOs, CTOs and anyone interested in Green IT and harnessing it to enhance our environment. For more details and a pdf extract of the 1st chapter on "Green IT: An Overview" visit http://goo.gl/iaBb7 (This book is being given as a prize to the TechQuiz Winners)

Engineering Optimization - A Modern Approach
Author: Ranjan Ganguli.
Published by: Universities Press.
Pages: 269.
Price: Rs. 350/=

The deployment of optimization techniques at the conceptual design stage of complex technical systems is today no longer a desirable trait but an absolute necessity. This book aims to make the optimization technique pervasive in engineering design by moving the problem from an academic setting to an industrial platform. It provides a thorough understanding of the concepts of optimization necessary for a robust design of technical systems. The approach is from a modern perspectiveit dwells on surrogate modelling and non-gradient-based algorithms and at the same time emphasizes classical methods for pedagogical reasons. Nonlinear optimization, response-surface method and genetic-algorithm approaches have been focussed upon to bridge the gap between nonlinear programming and engineering optimization techniques. The best way to learn optimization methods is undoubtedly by solving problems and following it up with exercises in computer programming. To enable this experience, the book has several solved examples, some of them non-trivial, besides many unsolved problems for the student to work out. In seven chapters, the text covers: Basic Concepts; Direct One-Dimensional Search; Gradient-Based Methods; Newtonian Methods; Constrained Optimization Methods; Response Surface Method; and Genetic Algorithmed More details at: http://goo.gl/nLrPa (This book is being given as a prize to the TechQuiz Winners)

TechQuiz 2013-03

(Two Prizes to win. Books reviewed will be presented to the winners)

1. Expand: WEEE.

2. Who coined the term "electricity"

3. The energy efficiency of a computer is expressed as ------.

4. What is the name of the IEEE's highest award, which recognizes an individual for an exceptional contribution or extraordinary career in the IEEE fields of interest.

5. ------ is a robot-seal therapeutic pet, being used in assisting people with Alzheimer's disease, dementia and autism.

Email your answers by **10th Apr 2013** to ieee.techquiz@gmail.com **with subject "techquiz-2013-03".** Please provide your name, designation, company/institution, full postal address (to send the prize) and the contact phone nos. after the answers.

There are TWO prizes to win. Two prizes will be in the form of books which are briefly reviewed in this edition of the newsletter. They are being offered by **Wiley India Pvt. Ltd** (www.wileyindia.com) and **Universities Press** (www.universitiespress.com). Answers along with the winners' info will be published in the next issue.

Answers & Winners of TechQuiz-2013-02

China, Tetsuro Mori, HEVC -- High Efficiency Video Coding / H.265, Advancing technology for Humanity, Sir Issac Asimov

"Signals and Systems" from Wiley India to Arshia Sharma (Chandigarh)

"Paths of Innovators (Volume 2)" from Universities Press to J. Jerald Inico (Chennai)