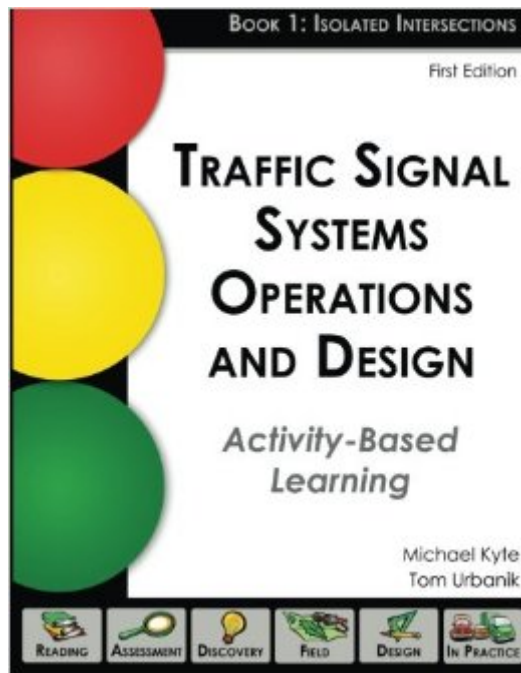


The book was found

Traffic Signal Systems Operations And Design: An Activity-Based Learning Approach (Book 1: Isolated Intersections)



Synopsis

We learn the lessons of traffic control early in life, and with good reason. There are nearly 300,000 traffic signals today in the United States. Each traffic signal performs the task of regulating whose turn it is to go and who must wait. A traffic signal system at its core has two major tasks: move as many users through the intersection as possible and do it with as little conflict between these users as possible. The first task relates to efficiency and capacity while the second relates to safety. Both tasks are performed by first clearly defining which group of users has the right of way at a given time and second by determining how long the group has the right of way. The content in this book is targeted at a senior or graduate level university course in transportation engineering and focuses on the design and operation of one important part of the traffic signal control system: the isolated intersection. Some of the material in this book may also be appropriate for portions of advanced classes in transportation engineering. Educational research points to a hands-on active learning environment as the best approach to improving student understanding of important concepts. Unlike many courses that emphasize an instructor focus (with lectures presented to students), this book emphasizes a student focus in which you will learn by doing an experiment, analyzing data that you collect, and drawing conclusions about what makes good signal timing practice. This approach requires a more active preparation for each class on your part and a readiness to actively participate in the work of each class. This focus on you means more work but it rewards you with the potential for deeper learning and understanding of this material. This book is divided into 10 chapters and includes 63 activities. The first four chapters of the book provide a base level of knowledge. Chapters 5 through 9 address specific system components, providing first an understanding of how these components function and second how to design them. Finally, Chapter 10 integrates the components together into a final design in which you prepare a report and make a presentation covering your work. Most chapters have a similar structure. Each chapter begins with a Reading that provides important information on the topics covered in the chapter. A series of activities follow, each providing hands-on experiences with the chapter topic. Assessment activities give you the chance to test and apply what you learned in the reading. Discovery activities provide you with the opportunity to discover new factors or perspectives about the chapter topic by observing animations, collecting or analyzing data, or making calculations. Field activities allow you to explore traffic flow and control conditions directly in the field and connect your field observations with the theory that you learned in other activities. Design activities allow you to determine one component of your design and evaluate its performance. In Practice activities give you the opportunity to compare your understanding or design component with recommended practice from the Traffic Signal Timing

Manual

Book Information

Paperback: 350 pages

Publisher: Pacific Crest Software, Incorporated (August 8, 2012)

Language: English

ISBN-10: 1602634203

ISBN-13: 978-1602634206

Product Dimensions: 8.5 x 0.8 x 11 inches

Shipping Weight: 2.2 pounds (View shipping rates and policies)

Average Customer Review: 4.6 out of 5 starsÂ Â See all reviewsÂ (9 customer reviews)

Best Sellers Rank: #754,946 in Books (See Top 100 in Books) #49 inÂ Books > Engineering & Transportation > Engineering > Civil & Environmental > Highway & Traffic #232 inÂ Books > Arts & Photography > Graphic Design > Commercial > Book Design

Customer Reviews

This text is a fantastic addition to the technical literature on traffic signal systems. The book can provide significant value to undergraduate and graduate classes on traffic signals, and the supplemental materials are outstanding.

One of the best references for students and instructors who are interested in traffic signal control. It makes the learning process fun and easy.

Excellent "HOW TO" book on designing traffic signal timing using computer software. I am looking forward to a Volume 2, etc.

This book is great for use in active learning in the classroom. The authors do a great job presenting the material.

A good guide book for actuated traffic signal system and design. Methods in book are easy but practical

[Download to continue reading...](#)

Traffic Signal Systems Operations and Design: An Activity-Based Learning Approach (Book 1: Isolated Intersections) Learning: 25 Learning Techniques for Accelerated Learning - Learn Faster

by 300%! (Learning, Memory Techniques, Accelerated Learning, Memory, E Learning, ... Learning Techniques, Exam Preparation) Occupation-Based Activity Analysis (Thomas, Occupation-Based Activity Analysis) Bayesian Signal Processing: Classical, Modern and Particle Filtering Methods (Adaptive and Cognitive Dynamic Systems: Signal Processing, Learning, Communications and Control) Learn: Cognitive Psychology - How to Learn, Any Skill or Subject in 21 Days! (Learn, Learning Disability, Learning Games, Learning Techniques, Learning ... Learning, Cognitive Science, Study) Minecraft Labyrinth : Math Activity Book and Coloring Book For Kids : Unique Labyrinths, Geometric Labyrinths and Math Labyrinths: (Unofficial ... (Unique Activity Book) (Volume 2) Design of Seismic Isolated Structures: From Theory to Practice Evidence in Traffic Crash Investigation And Reconstruction: Identification, Interpretation And Analysis of Evidence, And the Traffic Crash Investigation And Reconstruction Process Digital Signal Processing: with Selected Topics: Adaptive Systems, Time-Frequency Analysis, Sparse Signal Processing 7X YOUR BLOG TRAFFIC 2016: A beginners guide on how to increase your blog traffic,get website visitors and make more money online Texas Criminal and Traffic Law Manual 2011-2012: With Statutory Amendments Through the 82nd Legislative First Called Session, 2011 (Gould's Texas Traffic Laws) Texas Criminal and Traffic Law Manual, Softcover Edition (2013-2014) (Gould's Texas Traffic Laws) Jane's Air Traffic Control 2005-06 (Jane's Air Traffic Control) How to Prepare for the Air Traffic Controller Exam (Barron's How to Prepare for the Air Traffic Controller) Jane's Air Traffic Control (Jane's Air Traffic Control) Ramadan and Fasting Activity Book (Discover Islam Sticker Activity Books) Amazing Minecraft Math: Cool Math Activity Book for Minecrafters (Minecraft Activity Books) (Volume 1) Operation, Analysis, and Design of Signalized Intersections: A Module for the Introductory Course in Transportation Engineering The Whartons' Stretch Book: Featuring the Breakthrough Method of Active-Isolated Stretching Isolated: A Jason King Thriller (Jason King Series Book 1)

[Dmca](#)