1. Record Nr. UNISALENTO991002374709707536

Autore	Kim, Il-sung
Titolo	Pour organiser et deployer la lutte armèe contre l'imperialisme japonais : discours prononcé à la Conférence des cadres du parti et de l'Union de la jeunesse communiste tenue à Mingjouehkow, district de Yentchi le 16 décembre 1931 / Kim Il Sung
Pubbl/distr/stampa	Pyngyang : Èditions en langues etrangères, 1973
Descrizione fisica	31 p., [1]. c. di tav. : ill. ; 19 cm
Disciplina	320.9519
Soggetti	Kim, Il-sung - Discorsi politici
Lingua di pubblicazione	Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	In testa al front.: Ouvriers du monde entier, unissez-vous!

2. Record Nr. UNINA9910635391603321

Autore	You Huan
Titolo	Traffic Congestion Control by PDE Backstepping / / by Huan Yu, Miroslav Krstic
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2022
ISBN	3-031-19346-6
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (363 pages)
Collana	Systems & Control: Foundations & Applications, , 2324-9757
Disciplina	629.8 388.3142015118
Soggetti	System theory Control theory Differential equations Automatic control Systems Theory, Control Differential Equations Control and Systems Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Backstepping for Coupled Hyperbolic PDEs -- Part I: Basic Backstepping Control of Freeway Traffic -- Stabilization of ARZ Model with Known Parameters and Fundamental Diagram -- Observer Validation on Freeway Data -- Adaptive Control of ARZ Traffic Model -- Event-Triggered Control of ARZ Model -- Comparison of Backstepping with Reinforcement Learning -- Part II: Advanced Backstepping for Traffic Flows -- Two-Lane Traffic Control -- Two-Class Traffic Control -- Control of Two-Cascaded Freeway Segments -- Estimation of Freeway Diverge Flows -- Control under Routing-Induced Instability -- Bilateral Regulation of Moving Shock Position -- Extremum Seeking of Downstream Bottleneck.
Sommario/riassunto	This monograph explores the design of controllers that suppress oscillations and instabilities in congested traffic flow using PDE backstepping methods. The first part of the text is concerned with basic backstepping control of freeway traffic using the Aw-Rascle-

Zhang (ARZ) second-order PDE model. It begins by illustrating a basic control problem – suppressing traffic with stop-and-go oscillations downstream of ramp metering – before turning to the more challenging case for traffic upstream of ramp metering. The authors demonstrate how to design state observers for the purpose of stabilization using output-feedback control. Experimental traffic data are then used to calibrate the ARZ model and validate the boundary observer design. Because large uncertainties may arise in traffic models, adaptive control and reinforcement learning methods are also explored in detail. Part II then extends the conventional ARZ model utilized until this point in orderto address more complex traffic conditions: multi-lane traffic, multi-class traffic, networks of freeway segments, and driver use of routing apps. The final chapters demonstrate the use of the Lighthill-Whitham-Richards (LWR) first-order PDE model to regulate congestion in traffic flows and to optimize flow through a bottleneck. In order to make the text self-contained, an introduction to the PDE backstepping method for systems of coupled first-order hyperbolic PDEs is included. Traffic Congestion Control by PDE Backstepping is ideal for control theorists working on control of systems modeled by PDEs and for traffic engineers and applied scientists working on unsteady traffic flows. It will also be a valuable resource for researchers interested in boundary control of coupled systems of first-order hyperbolic PDEs.