Amelia C. Regan

University of Washington, Seattle
(949) 228-8626 (cell)
Aregan8@UW.edu
Winter, 2024

Education

University of Texas at Austin, MSE, Ph.D. (Civil Engineering) 1995, 1997
The Johns Hopkins University, MS (Applied Mathematics) 1990
University of Pennsylvania, BAS (Systems Engineering) 1987

Experience

University of Washington, Seattle

Director, MS in Supply Chain Transportation and Logistics, August 2022- Present
Associate Teaching Professor Department of Civil and Environmental Engineering, August 2022-Present

Primary Research Interests

Combinatorial Optimization, Warehouse Automation, Autonomous Vehicles for Freight Operations (on-road and facility based), Pedestrian Safety and Security, Sustainable Transport (Freight and Passenger), Labor Issues in Freight and Delivery Services, Machine Learning Tools for Temporal-Spatial Data Analysis and for Improving Air Cargo Operations

Primary Teaching Interests

Introduction to Supply Chain Transportation and Logistics
Sustainable Freight Transportation and Logistics
Automation in Freight Transportation and Logistics

Service

CEE Graduate Advisor Hiring Committee, August 2022
NSF Career Panel, Fall, 2022
TRB Special Committee on Best Practices for the Efficient Supply of Chassis for Transporting Intermodal Containers, December 2022-April 2024

Courses Taught

Introduction to Supply Chain Transportation and Logistics, Fall 2022
Freight Transportation, Winter 2023
Autonomous Vehicles and Automated Logistics Systems, Sprin 2023

University of California, Irvine

Professor Emeritus of Computer Science and Transportation Systems Engineering June 2022- Present
Professor of Computer Science, July 2009 – June 2022
Professor of Civil Engineering (courtesy), July 2009 – June 2022
Faculty Director, Master of Computer Science Program, 2015- 2018
Faculty Director, MS and PhD Programs in Transportation Science (Interdisciplinary Program) 2016- 2018

Associate Professor of Computer Science, July 2003 – June 2009
Associate Professor of Civil Engineering, July 2002 – June 2009
Associate Professor (Courtesy) Graduate School of Management, July 2002 –June 2005

Assistant Professor of Civil Engineering, March 1997-June 2002

<u>Assistant Professor (Courtesy) Graduate School of Management,</u> July 2001 – June 2002

<u>Associate Dean, Bren School of Information and Computer Science,</u> July 2006-June 2009
<u>Acting Associate Dean, Bren School of Information and Computer Science,</u> July 2005-December 2005
<u>Acting Associate Dean, UCI, Division of Undergraduate Education,</u> July 2003 - December 2003

Funded Research Projects (PI unless noted)

Dynamic Dispatching, Load Acceptance and Pricing Strategies for Carrier Fleet Operations: Potential for Improved Freight Mobility. Sponsor: University of California Transportation Center August 1997-July 1998

Assessment of the Perceptions of California Fleet Operators Regarding Transportation Problems, Expectations and Solutions (with Tom Golob, Institute of Transportation Studies). Sponsor: University of California Transportation Center August 1997-July 1998

Implementable dynamic dispatching algorithms for carrier fleet operations: Demand responsive service for standard ground and Intermodal freight movements Sponsor: Transportation Research Board ITS-IDEA, August 1998-July 1999

On-line Algorithms for dynamic dispatching of commercial vehicle operations (with Sandra Irani, Department of Information and Computer Science) Sponsor: University of California Transportation Center, September 1998-August 1999

Analysis and Development of Tools to Support Intermodal Operations. Sponsor: JBHunt Transportation Inc./The Logistics Institute January 1999-January 2001 (two separate awards made)

Dynamic Freight and Fleet Management: Modeling, Algorithm Development and Implementation. Sponsor: NSF CAREER Award, July, 1999- June, 2003

Impacts of Shipping Changes on the Efficiency of the Freight Transportation Network (with Tom Golob) Sponsor: University of California Transportation Center, September 1999-August 2000

Online verses Rolling Horizon Algorithms for Dynamic Service Fleet Operations (with Sandy Irani) Sponsor: University of California Transportation Center, September 1999-August 2000

Deployment Paths of ATIS: Impact on Commercial Vehicle Operations, Private Sector Providers, the Public Sector Role Sponsor: California Partners for Advanced Transportation and Highways (PATH), July 2000 - June 2001

E-commerce and the efficiency of the California freight network: Perspectives of shippers, carriers and third party logistics and information services providers (with Tom Golob) Sponsor: University of California Transportation Center, July 2000-June 2001

Inventory theoretic models of freight demand: Revisiting the past in light of the new economy Sponsor: University of California Transportation Center, July 2000-June 2001

Dynamic and Stochastic Vehicle Dispatching with Time Dependent Travel Times: The Next Generation of Algorithms Sponsor: National Science Foundation/US Department of Transportation, January 2002-December 2002

Policies for Safer and More Efficient Truck Operations on Urban Freeways Sponsor: University of California Transportation Center, Jan 2003-December 2003

Shifting Trucks from Roads to Rails in the Ports of LA/Long Beach: Feasibility and Emissions Impacts, Caltrans (subcontract to UC Davis), July 2003-June 2004

Combinatorial Auctions for Freight Transportation Contract Procurement, Sponsor: University of California Transportation Center, October 2003 – September 2004

Modeling Matched Traffic and Accident Datasets to Significantly Improve Safety and Efficiency of Urban Freeway Operations, Sponsor: National Science Foundation/US Department of Transportation, September, 2003-March 2005.

Shifting Trucks from Roads to Rails in the Ports of LA/Long Beach: Feasibility and Emissions Impacts, Caltrans (subcontract to UC Davis), July 2003-June 2004

ITS Solutions to I-710 Corridor Challenges, Sponsor: California Partners for Advanced Transportation and Highways (PATH), April 2004 - August 2004

Capacity Modeling for Large Scale Multimodal Transportation Systems, Sponsor: University of California Transportation Center

An evaluation of California's chassis network Sponsor: California Partners for Advanced Transportation and Highways (PATH), April 2004 - August 2004

Models for Evaluating General Truck Transportation Management Strategies Sponsor: California Partners for Advanced Transportation and Highways (PATH), September 2004 - August 2005

Real Option-based Procurement for Transportation Services Sponsor: University of California Transportation Center, January 2008 – September 2008

American Indian Summer Institute in Computer Science, Sponsor, NSF, (Co-PI), July 2007-July 2011

Freight Data Collection and Analysis Sponsor: Caltrans, January 2008 – March 2010

Large Scale Real Options Models for Network Investment Planning and
Operational Risk Hedging, Sponsor: University of California Transportation Center, September 2008 – August 2009

Dynamic Lane Sharing (with Lead campus UCB and UCD), Sponsor University of California MPRI, January 2010-August 2012

Implementable Models for Efficient Transportation Systems Management: Breaking through the Computing Barrier, Sponsor: University of California Transportation Center, September 2012 – June 2014

Innovate From the Start: Engaging Engineering and Computer Science Undergraduates: Sponsor: NSF (Co-PI), October 1, 2014- September 31, 2018

UCOP Grant to develop an on-line upper division writing class, September 2016-August 2017

Enabling Paratransit and TNC Services with Blockchain Based Smart Contracts Sponsor: Pacific Southwest Region University Transportation Center, Jan 2019-June 2020

The Impacts of Covid-19 on Transportation Gig Workers, Sponsor: Pacific Southwest Region University Transportation Center, August 2020-July 2021

Courses Taught

Graduate

Capstone Writing and Professional Communication (MCS)
Seminar on Parallel Metaheuristics for Combinatorial Optimization
Analysis of Algorithms
Introduction to Optimization
Transportation Logistics I: Introduction to Logistics and Supply-Chain Management
Transportation Logistics II: Distribution Systems Modeling
Transportation Logistics III: Location and Location/Routing
Advanced Transportation Systems Analysis: Introduction to Mathematical Programming
Stochastic Modeling and Simulation
Transportation Engineering Seminar
Transportation Economics Seminar

Undergraduate

Seminar on Parallel Metaheuristics for Combinatorial Optimization
Critical Writing about Technology
Graph Algorithms
Network Optimization
Boolean Algebra and Logic
Systems Analysis and Technical Communication
Engineering Ethics, Technology Impacts and Effective Communication
How Computers Work
Civil & Environmental Engineering Methods I: Problem Solving and Computation
Civil & Environmental Engineering Methods II: Probability and Statistics
Civil & Environmental Engineering Methods IV: Introduction to Operations Research
Problem Solving Through Recreational Mathematics (Freshman Seminar)
The Art of Quick and Accurate Calculation (Freshman Seminar)
Information Technology in the Popular Press (Freshman Seminar)
Undergraduate Independent Study in Logistics and Supply Chain Management
Undergraduate Independent Study in Computing in Civil Engineering
Undergraduate Independent Study in Optimization Modeling
Undergraduate Independent Study in Distributed Computing for Combinatorial Optimization Problems

Other

What are the chances of that? Probability in everyday life. A seminar presented to junior high and high school teachers as part of the UCI-Santa Ana Teachers institute
Everyday applications of statistics A seminar presented to junior high and high school teachers as part of the UCI-Santa Ana Teachers institute
What are the chances? Probability, Computing and Simulation. A course presented in the UCI COSMOS program (California State Summer School in Math and Science).
Introduction to Simulation Modeling A course presented in the UCI COSMOS program
Discrete Mathematics for Computer Science. A course presented in the UCI COSMOS program
The Magic of Discrete Mathematics A course presented in the UCI COSMOS program

Graduate Student Supervision

 MS Students

 Sreeram Jagannathan (MS, September 1999)
     Thesis: Analysis of dynamic dispatching heuristics for carrier fleet operations in a GIS framework
 Fenghuan Wang (MS, September 2000)
 Barbara McGahey (MS, September 2001)
 Srinivas Nandiraju (MS September 2002)

Thesis: Examination of Alternative Cutting Plane Methods for Integer Programming Problems with Binary Variables

Sankar Janakiraman(MS June 2002)
   Thesis: Empirical Examination of Alternative Assignment models for Time Constrained Local Fleet Assignment in which Service and Travel Times are Stochastic

Kyra Tao (MS, June, 2005)
   Thesis: Diverting Trucks to Rail: The Southern California Case Study

Karou Sperry (MS, September 2005)
   Thesis: Data Mining for improved understanding of Truck Involved Accidents

Marcel Lopez (MS, Summer, 2007)
   Thesis: Teaching basic optimization algorithms using graphical calculators

Maury Gridley (MS, Fall 2011)
   Thesis: The use of Stochastic Local Search for Solving Combinatorial Auctions

Arun Balagopalan (MS, Winter, 2012)
   Thesis: Improving Topic Reproducibility in Topic Models

Ali Mehrabi Davoodabadi (MS Summer, 2012)
   Topic: On-Line Secretary Problems and their Variants

Ross Wagner (MS Spring, 2013)
   Topic: Parallel Metaheuristics on GPUs for Precedence Constrained Traveling Salesman Problems

Karina Hermawan (MS, Spring, 2016)
    Topic: Fatal Accidents and Passenger Mortality Risks: Measuring Recent Air Travel Safety Across Countries

Runyi Wang (MS, Spring 2017)
   Topic: Estimating the supply and demand mismatch for a large transportation management company using machine learning.

Boyian Jiang (MSCEE, Fall 2020)
    Topic: Missing data in Machine Learning Models of short term Traffic Flows

Boyian Jiang (MSCS, Fall 2021)
    Topic: New Missing data in Machine Learning Models of short term Traffic Flows

Dozens of MS papers and final projects supervised in Computer Science, Transportation Science and Civil Engineering.

PhD Students Graduated

Xiubin Wang (Ph.D, December 2000), Professor of Civil Engineering, Texas A&M University
      Dissertation: Dynamic and stochastic carrier fleet management: Application to local truckload trucking operations

Xiangwen Lu (Ph.D, September, 2001), Formerly Assistant Professor, Industrial Engineering and Operations Research, Hong Kong University of Science and Technology, currently Business Analyst, Cisco, Bay Area, California
      Dissertation: Dynamic and Stochastic Routing Optimization: Algorithm Development and Performance Analysis

Paul Forster, (PhD, Summer 2002), Associate Professor, Hong Kong University of Science and Technology
       Sadly, Paul's life was cut short by a sudden illness in December 2020.
      Dissertation: Information Technology Adoption and Use in US Scheduled Air Cargo Forwarders and Airlines

Jiongjiong (John) Song (PhD, June 2003), Vice President, AECOM, Austin Texas
      Dissertation: Optimal strategies in combinatorial auctions: The case of freight transportation contracting

Minyoung Park (PhD, December, 2005), Dean and Professor, Inha University, South Korea

Dissertation: Capacity analysis for large scale freight transportation systems

Srinivas Nandiraju (PhD, March, 2006), Senior Leader, Supply Chain Optimization and Data Science, Apple
Dissertation: Optimal contracting for freight transportation services

Choong Heon Yang (PhD, March, 2008), Senior Researcher, Korea Institute of Civil Engineering and Building Technology
Dissertation Research: Multi-Criteria Decision Making for Prioritizing Potential Alternative Truck Management Strategies

Pruttipong (Palm) Apivatanagul (PhD, Fall 2008), Logistics Management Consultant, Thailand.
Dissertation Research: Network Design Formulations, Modeling, and Solution Algorithms for Strategic Planning Long Haul Freight Movements

Jiana-Fu (Jeff) Wang (PhD, Fall, 2008) Associate Professor, National Chung Hsing University, Taiwan
Dissertation Research: Optimization of large scale cross docking operations

Mei-Ting (May) Tsai (PhD, Fall, 2009) Associate Professor, National Chung Hsing University, Taiwan
Dissertation Research: A real-options approach to freight transportation derivatives contract development

Joseph Chow (PhD March, 2010), Associate Professor, New York University
Dissertation Research: Network Design Under Uncertainty using a Real Options Approach

Rex Chen (PhD Fall, 2010), 5G Evangelist, Venture Capital Investor
Dissertation Research: Broadcasting in Vehicular Ad Hoc Networks

James Benvenuto (PhD, Fall 2010), Research Staff Member at HRL Laboratories, Center for Neural and Emergent Systems, Santa Monica, CA
Dissertation Research: Epitaxis A System for Deductive and Constructive Program Queries

Di Wu (PhD, Winter 2013) Professor, Computer Science, Hunan University, China
Dissertation Research: Location Based Services in Vehicular Networks

Tianbing Xu (PhD, Fall 2013), Senior Research Scientist/Software Engineer, Facebook, Bay Area, California
Dissertation Research: Online Advertising: A Large Scale Computing Perspective

Scott Godfrey (PhD, 2016), Senior Engineer, Zoox, Bay Area, California
Dissertation Research: Cross-System Runtime Prediction of Parallel Applications on Multi-Core Processors

Dmitri Arkhipov (PhD, 2017), Independent Software Engineering Consultant, Irvine
Dissertation Research: Computational Models for Scheduling in Online Advertising

Karina Hermawan (PhD, 2018), Senior Data Analyst, Hyundai Air Mobility
Dissertation Research: Transportation Network Companies' (TNC) Impacts and Potential on Airport Access

Reza Asadi (PhD, Spring 2020), Machine Learning Research Engineer, Uber
Dissertation Research: Neural Network Models for Spatio-Temporal Data Forecasting and Analysis

Amari Lewis (PhD Spring, 2021), UC San Diego Department of Computer Science, Post Doctoral Researcher and lecturer.
Dissertation Research: Case Studies in Secure Contracting and communication in Transportation Systems,

Dalal Alharthi (PhD Spring, 2021), University of Arizona, Assistant Professor of Practice in Cyber Systems (tenure track)

    Dissertation Research: Social Engineering Defense Mechanisms and InfoSec Policies: A Survey and Qualitative Analysis, University of Arizona, Assistant Professor of Practice in Cyber Systems

Ceasar Aguma (PhD Summer, 2022), Data Scientist, ETS
    Dissertation Research: Auction Mechanism Design for Housing and Transportation Resource Allocation

Post Doctoral Researcher Supervision

Dmitri Arkhipov, PhD Computer Science, University of California, Irvine

Soumia Ichoua, PhD Computer Science, University of Montreal
Research area: Applications of Optimization Techniques to Dynamic and Stochastic Distribution Systems, Telecommunication Systems and E-commerce, Location Theory

Xiangwen Lu, PhD Transportation Systems Engineering, University of California, Irvine
Research area: Dynamic and Stochastic Routing and Scheduling, Inventory Management

Jiongjiong Song, PhD Transportation Systems Engineering, University of California, Irvine
Research area: Emissions Modeling, Truck/Rail Tradeoffs

Choon Heon Yang, PhD, Transportation Systems Engineering, University of California, Irvine
Research area: Freight Flow Modeling

Service (UC Irvine)

Departmental, School, Academic Senate and UC Wide Committee Appointments

Civil & Environmental Engineering Graduate Studies Committee (Graduate Admissions Coordinator: Transportation Group, 1998-2001)
Civil & Environmental Engineering Computer Committee (Chair)
Civil & Environmental Engineering Corporate Affiliates Program - Program Planning Committee
School of Engineering Library Committee (Chair)
School of Engineering Committee on Computing
Computer Science Graduate Admissions Committee, 2008-Present
UCI Academic Senate Committee on Teaching (Chair 2001-2002, 2002-2003)
UCI Academic Senate Committee on Student Experiences (Co-Chair 2003-2004)
UCI Faculty Board for Undecided Undeclared Students (2006-2009)
UCI Faculty Committee on Parking (2005-2007)
UCI Academic Senate Committee on Rights, Responsibilities & Welfare
    Ad Hoc Study Group on the Summer Session
UCI EVC's working group on the expansion of the Summer Session, academic senate representative
UCI RGS Faculty Advisory Group on the Electronic Educational Environment to the Office of Academic Computing
UCI RGS Advisory Group on the development of an electronic environment in support of graduate recruiting, retention and student life
University of California Teaching Learning and Technology Center Grant Evaluation Committee 2001-2003
University of California Pacific Rim Research Program Grant Evaluation Committee 2003-2006, 2006-2009
UCI Pacific Rim Research Program Internal Grant Evaluation Committee 2009-2012
UCI Committee on Academic Personnel 2010-2013

ICS, Department of Computer Science Admissions Committee, 2008-2013
University of California President's Postdoctoral Fellowship Program, application reviewer, 2011-2013
ICS Student Affairs Director Search Committee, 2012
ICS Executive Committee, Vice Chair, 2013-2014
CS Decade Mentor, 2013- Present
Faculty Director, MS and PhD programs in Transportation Science, 2015-2018
Faculty Director, CS MCS Degree Program, 2015-2018
UCI Representative System Wide UCOLASC (Committee on Scholarly Communication and the Libraries), 2016 – 2019

Other Substantial UCI Service

Division of Undergraduate Education, Advisor, Unaffiliated Undeclared Students 1999-2007
Director, UCI/Anaheim School District Teachers as Scholars Program, 2002-2003
Faculty Advisor, Society of Women Engineers, 2001-2004
UCI-Santa Ana Teachers Institute, Instructor, 2000-2002
California State Summer School in Math and Science, Instructor, 2001-2003, 2005
Participant, Newport/Mesa, Santa Ana and Los Angeles School Districts "Ask a scientist" nights
McNair Program Board of Directors, 2001-2003
Regular speaker, CAMP (California Alliance for Minority Participation), McNair and AGEP (Alliances for Graduate Professionals and the Sciences) programs
Participant, UCI Graduate Fellowship Selection Committees
Faculty Mentor for the winning team in the 2003 ICS extreme computing competition
Faculty Mentor, 2004 ICS extreme computing competition
Acting Associate Dean, Division of Undergraduate Education, Summer, Fall 2003
Statistics Department Search Committee, 2003-2004, 2004-2005
CALIT2 search committee 2005-2006
Transportation Economics Search Committee, 2003-2004
Statistics Department Search Committee, 2004-2005
Dean, Undergraduate Education Search Committee, 2004-2005
CALIT2 Faculty Advisory Board, 2007-2012

Professional Memberships/Service

Institute for Operations Research and the Management Sciences (INFORMS)
 Transportation Science Section: Council Member, 1999-2001, Vice Chair, 2003-2004, Chair 2004-2005
  Cluster Coordinator for fall 1998 meeting, Cluster Coordinator for fall 2002 meeting
 Logistics Section; Cluster Coordinator for fall 1999 meeting
 Women in ORMS Forum, 1997-2001, VP Communications & Webmaster, 1997-2001, VP and President Elect, 2002-2003, President, 2003-2004
 Teaching of Practice Prize Committee Member, 1999-2001

Transportation Research Board (TRB)
 Member, Freight Planning and Logistics Committee: Contributor and Primary Editor, Freight Planning and Logistics TRB Millennium Paper, Paper and Session Editor for the 2002, 2003, 2004 Meetings, Logistics Subcommittee Chair 2002-2008
 Member, Network Analysis Committee, Network and Commercial Fleet Subcommittee Chair 2003-2009

IEEE

University of California Transportation Center, Advisory Board, 2000-2004, Chair, dissertation prize committee 2000-2002

World Congress on Transportation Research
 Founding member of the SIG on Traffic Theory and Modeling, 2014-present

Editorial Advisory Board

Transportation Research, Part B, Methodological, 1997-2018
Transportation Research Record (Freight Planning and Logistics Committee, Network Analysis Committee), 1999-2009

Editorial Board

International Journal of Advanced Logistics, 2014- present

Paper Reviewer

4OR - A Quarterly Journal of Operations Research
Applied Mathematical Modelling
Artificial Intelligence Review
Computational Optimization and Applications
Computers and Industrial Engineering
Computers and Operations Research
Computing Reviews
European Journal of Operations Research
European Journal of Transport and Infrastructure Research
EURO Journal on Transportation and Logistics
IEEE Transactions on Automation Science and Engineering
IEEE Transactions on Intelligent Transportation Systems
IEEE Transactions on Networks
IEEE Transactions on Vehicular Technology
IEEE Intelligent Transportation Systems Magazine
IIE Transactions
Interfaces
International Journal of Quality, Statistics, and Reliability
Journal of Multi-Criteria Decision Analysis
Journal of Optimization Theory and Applications
Journal of the Operational Research Society
Journal of Transportation Engineering
Journal of Transport Geography
KSII Transactions on Internet and Information Systems
Management Science and Operations Management
Management Science and Operations Research
Naval Logistics Quarterly
Networks and Spatial Economics
Operational Research
Operations Research
PLOS-One
Research in Transportation Economics
Sensors
Transport Policy
Transportation Research Record
Transportation Research, Part A: Policy and Practice
Transportation Research, Part B: Methodological
Transportation Research, Part C: Emerging Technologies
Transportation Research, Part E: Logistics and Transportation Review
Transportation Science
World Congress of Transportation Research

Proposal Reviewer

PATH
USC METRANS
Oregon OTREC
Purdue JTPR
Maryland Industrial Partnerships
Northwestern University Transportation Center
Hong Kong Research Council
Singapore Agency for Science Technology and Research,
Chilean National Science Foundation FONDECYT
Dutch Technology Foundation STW
Israel Science Foundation
United States – Israel Binational Science Foundation
Qatar National Research Fund
NSF
    Construction and Transportation Engineering Review Panel, June, 1999,
    Innovations in Service Systems Review Panel, June 2002
    CAREER Review Panel, Fall 2003
    Math Science Partnership Review Panel, February, 2004
    CAREER Review Panel, Fall 2006
    Transportation Review Panel, Fall 2008
    CMMI Review Panel, Fall 2011(ad hoc reviewer)
    CMMI Review Panel, Spring 2012
    Transportation Review Panel, Spring 2015
    Smart and Connected Cities Panel, Spring 2020
    Smart and Connected Cities Panel, Spring 2021
    CAREER Panel CMMI, Fall 2022

Other

Member, National Academies of Sciences Panel on International Trade and Transportation, 2003-2004
Participant: NSF workshop on Planning, Design, Management and Control of Transportation Systems (December, 1997), NSF Engineering Education Scholars Program (June, 1997), NSF workshop on Teaching Simulation (August, 1998), NSF workshop on Women in Industrial Engineering in Academia, May, 2012
Team Leader, National Academies of Sciences Panel on Committee on Technologies and Approaches for Reducing the Fuel Consumption of Medium- and Heavy-Duty Vehicles, Phase 2, 2013-2017
Member, search committee for Chaired Professor at the Technical University of Dresden, 2021
Member, National Academies of Sciences/TRB Panel on Best Practices for Efficient Supply of Chassis for Intermodal Containers

Consulting

Market Data Corporation, on the development of electronic freight marketplaces 2000-2001
Fortigo, Corporate Advisor on the development of an ASP to facilitate Shipper/Carrier interactions, 2001
NTE, on the development of an ITS architecture for the Ports of Long Beach/LA, 2004
USAID, on the application of emerging technologies for port efficiency, safety and security in Jordan, 2005

Expert Witness Experience

On the quality of a large scale third party logistics software system for Gordon Thomas Honeywell, 2011-2013
On Transportation and Hospitality Patents, Groombridge, Wu, Baughman & Stone LLP

University College London
    Reuben Smeed Memorial Professorial Research Fellow, Center for Transport Studies**,** March 2015-July 2015

The Athens University of Economics and Business
    Visiting Professor, Decision Sciences Summer 2002, Spring 2003, Spring 2004, Spring 2005, Spring 2006

Technical University of Denmark
    Visiting Professor, Operations Research Summer, 2003

The University of Texas, Department of Civil Engineering, Austin TX
    Graduate Research Assistant, September 1991-December 1996

University of Montreal, Center for Research on Transportation Montreal, (Quebec)
    Visiting Graduate Research Assistant, Fall 1994

Arrowsmith Technologies, Austin TX 1992-1994
    Operations Research/Systems Engineering Analyst (Part time)

United Parcel Service/ROADNET Technologies, Baltimore, MD 1988-1991
    Software Engineer/Operations Research Analyst/Industrial Engineering Supervisor

Association of American Railroads, Washington, DC 1987 - 1988.
    Research Analyst

United Parcel Service, Philadelphia, PA 1986 - 1987.
    Industrial Engineering Intern

Awards

Best Paper Award – VEHITS 2021 -- A Trusted Blockchain-based Emissions Trading System for Vehicle-to-Vehicle Networks, Lam D Nguyen, Amari Lewis, Israel Leyva-Mayorga, Amelia Regan and Petar Popovski
Best Paper Award -- ACM SIGSPATIAL – Predict2019 Workshop, Spatio-Temporal Clustering of Traffic Data with Deep Embedded Clustering, Resa Asadi and Amelia Regan.
Rueben Smeed Memorial Professorial Research Fellowship, University College London 2014-2015
INFORMS Featured Article on-line, Chow, J.Y-J., and A.C. Regan (2011), Real Option Pricing of Network Design Investments, Transportation Science, 45(1), http://www.informs.org/Sites/IPOL/Featured-Articles
University of California Irvine Academic Senate Distinguished Faculty Mid-Career Award for Service, 2005-2006
University of California, Irvine, Department of Civil Engineering, Outstanding Assistant Professor Award, 2000
National Science Foundation CAREER Award, 1999-2003
Dwight D. Eisenhower Dissertation Fellowship, 1993-1996
University of Texas at Austin Advanced Institute for Transportation Infrastructure and Engineering Fellow, 1991, 1992, 1996
Winner, National Motor Carrier Symposium Student Paper Competition, 1992

Publications (over 175 refereed journal articles, conference proceedings and book chapters)

Refereed Journal Articles

J. 76   Ouyang, J., Yu, M., Yu, W., Qin, Z., Regan, A.C. and Wu, D., (2024). TPGraph: A Spatial-Temporal Graph Learning Framework for Accurate Traffic Prediction on Arterial Roads. IEEE Transactions on Intelligent Transportation Systems.

J. 75   Shafienya, H., and A.C. Regan (2022), 4D flight trajectory prediction using a hybrid Deep Learning prediction method based on ADS-B technology: a case study of Hartsfield–Jackson Atlanta International Airport (ATL), Transportation Research Part C: Emerging Technologies.

J. 74   Zhang, Q., Zeng, F., Xiao, Z., Jiang, H., Regan, A.C., Yang, K. and Zhu, Y. (2022). Toward Predicting Stay Time for Private Car Users: A RNN-NALU Approach. IEEE Transactions on Vehicular Technology, 71(6), pp.6007-6018.

J. 73   Bai, J., Shi, W., Xiao, Z., Regan, A.C., Ali, T.A.A., Zhu, Y., Zhang, R. and Jiao, L. (2022). Hyperspectral Image Classification based on Superpixel Feature Subdivision and Adaptive Graph Structure. IEEE Transactions on Geoscience and Remote Sensing.

J. 72   Long, W., Li, T., Xiao, Z., Wang, D., Zhang, R., Regan, A., Chen, H. and Zhu, Y. (2022), Location Prediction for Individual Vehicles via Exploiting Travel Regularity and Preference. IEEE Transactions on Vehicular Technology.

J. 71   Bai, J., Huang, S., Xiao, Z., Li, X., Zhu, Y., Regan, A.C. and Jiao, L. (2022), Few-Shot Hyperspectral Image Classification Based on Adaptive Subspaces and Feature Transformation. IEEE Transactions on Geoscience and Remote Sensing.

J. 70   Sheikh, M. S., and A.C. Regan (2022), A Complex Network Analysis Approach for Estimation and Detection of Traffic Incidents Based on Independent Component Analysis, Physica A: Statistical Mechanics and its Applications, 586, 126504.

J. 69   Bai, J, Yu, W, Xiao, Z, Regan, A, Wu, D, Jiao, L (2021), Two–Stream Spatial-Temporal Graph Convolutional Networks for Driver Drowsiness Detection, IEEE Transactions on Cybernetics.

J. 68   Chae, R. and A.C. Regan (2021), An Analysis of Harmony Search for Solving Sudoku Puzzles, Soft Computing Letters.

J. 67   Xiao, Z., H. Xiao, W. Chen, H. Chen, A.C. Regan, H., Jiang (2021), Exploring Human Mobility Pattern and Travel Behavior: A Focus on Private Cars, IEEE Intelligent Systems Magazine.

J. 66   Sheikh, M. S., Wang, J., and A.C. Regan (2021), A Game Theory-Based Controller Approach for Identifying Incidents Caused by Aberrant Lane Changing Behavior, Physica A: Statistical Mechanics and its Applications.

J. 65   Jiang, B., M.D., Siddiqi, R. Asadi and A.C. Regan,(2021), Imputation of Missing Traffic Flow Data Using Denoising Autoencoders, Procedia Computer Science, in press.

J. 64   Siddiqi, M.D. B. Jiang, R. Asadi and A.C. Regan, (2021), Hyperparameter Tuning to Optimize Implementations of Denoising Autoencoders for Imputation of Missing Spatio-temporal Data, Procedia Computer Science, in press.

J. 63   Bai, J., B. Ding, Z. Xiao, L. Jiao, H. Chen, and A. C. Regan (2021), Hyperspectral Image Classification Based on Deep Attention Graph Convolutional Network, IEEE Transactions on Geoscience and Remote Sensing, in press.

J. 62   Alharthi D., and A.C. Regan, A Literature Survey and Analysis on Social Engineering Defense Mechanisms And Infosec Policies (2021), International Journal of Network Security & Its Applications, in press.

J. 61   Xiao, Z., Xu, S., Li T., Zhang, R., Jiang H., Regan A.C. and Chen, H. (2021), On Extracting Regular Travel Behavior of Private Cars Based on Trajectory Data Analysis, IEEE Transactions on Vehicular Technology, in press.

J. 60   Chae, J. and Regan A.C., 2020, A Mixed Integer Programming Model for a Double Row Layout Problem, Computers and Industrial Engineering, 140.

J. 59   Arkhipov, D, Wu, D, Wu, T and Regan A., 2020, A Parallel Genetic Algorithm Framework for Transportation Planning and Logistics, IEEE Access.

J.58   Asadi, R. and Regan, A., 2020. A Spatial-Temporal Decomposition Based Deep Neural Network for Time Series Forecasting, Applied Soft Computing, 87.

J. 57   Wu, D., Lambrinos, L., Przepiorka, T., Arkhipov, D.I., Liu, Q., Regan, A.C. and McCann, J.A., 2019. Enabling Efficient Offline Mobile Access to Online Social Media on Urban Underground Metro Systems. IEEE Transactions on Intelligent Transportation Systems.

J.56   Shi, F., Wu, D., Arkhipov, D.I., Liu, Q., Regan, A.C. and McCann, J.A., 2018. ParkCrowd: Reliable crowdsensing for aggregation and dissemination of parking space information. IEEE Transactions on Intelligent Transportation Systems.

J. 55.   Hermawan, K. and A.C. Regan (2017), On-Demand, App-Based Ride Services: An Emerging Ground Transportation Mode at Los Angeles International Airport (LAX), Journal of the Transportation Research Forum 56 (3)

J 54.   Hermawan, K. and A.C. Regan (2018), Impacts on Vehicle-Occupancy and Airport Curb Congestion of Transportation Network Companies at Airports, Transportation Research Record, Journal of the Transportation Research Board, 2672 (23).

J 53.   Wu, D., Arkhipov, D.I., Kim, M., Talcott, C.L., Regan, A.C., McCann, J.A. and Venkatasubramanian, N. (2017), ADDSEN: Adaptive Data Processing and Dissemination for Drone Swarms in Urban Sensing, IEEE Transactions on Computers, 66 (2).

J 52.   Wu. D., L. Qiang, L. Yong, J. McCann, A.C. Regan and N. Venkatasubramanian (2016), Adaptive Lookup of Open WiFi using Crowdsensing IEEE/ACM Transactions on Networking, 24 (6).

J 51.   Wu, D., D I. Arkhipov, Y. Zhang, C.H. Liu and A.C. Regan (2015), Online Wardriving by Compressive Sensing. *IEEE Transactions on Mobile Computing*, 14 (11).

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C 20.   Golob, T.F. and A.C. Regan (2003), Traffic Congestion and Trucking Managers' Demand for Routing and Scheduling Software, proceedings of the 82nd meeting of the Transportation Research Board.

C 19.   Song, J. and A.C. Regan (2003), Combinatorial Auctions for Transportation Service Procurement: The Carrier Perspective, proceedings of the 82nd meeting of the Transportation Research Board.

C 18.   Golob, T.F. and A.C.Regan (2003), Trucking Industry Perceptions of Traveler Information for Drivers Using Wireless Internet-enabled Devices, proceedings of the 82nd meeting of the Transportation Research Board.

C 17.   Lu, X, A.C. Regan and S. Irani (2002), Dynamic Traveling Repair Problem: Examination of an Asymptotically Optimal Algorithm, proceedings of the 81st meeting of the Transportation Research Board.

C 16.   Regan, A.C., J. Herrmann, and X. Lu (2002), The Relative Performance of Heuristics for the Dynamic Traveling Salesman Problem, proceedings of the 81st meeting of the Transportation Research Board.

C 15.   Irani,S, X. Lu and A.C. Regan (2002), Competitive Analysis of Algorithms for the Dynamic Traveling Salesman Problem, proceedings of the 2002 meeting of the Symposium on Discrete Algorithms, San Francisco, January.

C 14.   Lu, X. A.C. Regan and S. Irani (2001), Dynamic and Stochastic Fleet and Freight Management: Algorithm Development and Performance Analysis, Proceedings of the 2001 TRISTAN Conference, San Pablo, June.

C 13.   Wang, X and A.C. Regan (2001), Assignment models for local truckload trucking problems with stochastic service times and time window constraints, Proceedings of the 80th meeting of the Transportation Research Board, Washington DC, January.

C 12.   Golob, T.F. and A.C. Regan (2001), Carrier perceptions of the Usefulness of Various Sources of Information, Proceedings of the 80th meeting of the Transportation Research Board, Washington DC, January.

C 11.   Regan, A.C. and J. Song (2001), An Industry in Transition: Third Party Logistics in the Information Age, Proceedings of the 80th meeting of the Transportation Research Board, Washington DC, January.

C 10.   Golob, T.F. and A.C. Regan (2001), Impacts of Information Technology on Personal Travel and Commercial Vehicle Operations: Research Challenges and Opportunities, Proceedings of the 80th meeting of the Transportation Research Board, Washington DC, January.

C 9.   Regan, A.C., S. Jagannathan, and X. Wang (2000), Mixed global and local assignment algorithms for quasi dynamic local truckload trucking operations with strict time-windows, proceedings of the 79th meeting of the Transportation Research Board, Washington DC, January.

C 8.   Golob, T. and A.C. Regan (2000), Trucking Industry Demand for Information Technologies, A Multivariate Discrete Choice Model, Proceedings of the 79th meeting of the Transportation Research Record, Washington DC, January.

C 7.   Regan, A.C. and R.A. Garrido (2000), Freight demand and shipper behavior modeling: State of the art, directions for the future, resource paper, *proceedings of the 2000 meeting of the International Association of Travel Behavior Modeling (IATBR),* Gold Coast, Australia, July.

C 6.   Golob, T. and A.C. Regan (2000), Impacts of Highway Congestion on Freight Operations, Perceptions of Industry Managers, Proceedings of the 79th meeting of the Transportation Research Record, Washington DC, January.

C 5.   Golob, T., and A.C Regan (1999), Freight Industry Attitudes Towards Policies to Reduce Congestion, Proceedings of the 78h meeting of the Transportation Research Record, Washington DC, January.

C 4.   Regan, A.C. and T.F Golob (1999), Freight Operators' Perceptions of Congestion Problems and the Application of Advanced Technologies: Results from a 1998 survey of 1200 companies operating in California, Proceedings of the 78h meeting of the Transportation Research Record, Washington DC, January.

C 3.   Regan, A.C., Mahmassani, H.S. and P. Jaillet (1995), "Dynamic vehicle allocation under real time information: operational considerations and potential efficiencies", *proceedings of the Fourth International Conference on Applications of Advanced Technologies in Transportation Engineering*, Capri, Italy, June.

C 2.   Regan, A.C., H.S. Mahmassani and P. Jaillet (1995), "Dynamic Vehicle Allocation for Fleet Management: Operational Changes for Improved Efficiency", *proceedings of the Second World Congress on Applications of Transport Telematics & Intelligent Vehicle-Highway Systems*.

C 1.   Regan, A.C., H.S. Mahmassani and P. Jaillet (1994), "Real Time Information for Improved Efficiency of Commercial Vehicle Operations", *proceedings of the First World Conference on Applications Transport Telematics & Intelligent Vehicle-Highway Systems*.

Extended Abstracts

Regan, A.C. (2012), Cyber-Physical Transportation Systems: Promise and Challenges, Invited Position Paper, 1st International Workshop on Reliable CyberPhysical Systems, WRCPS 2012, University of California, Irvine, October 2012

Regan, A.C., Mahmassani, H.S. and P. Jaillet (1998), Dynamic Re-Sequencing and En-route Diversion Strategies for Carrier Fleet Operations: Simulation Investigation, *preprints of the TRISTAN III conference*, San Juan PR, June.

Published Book Reviews

R. 4 Regan A.C. (2014) Review of Combinatorial search : from algorithms to systems by Y. Hamadi, Springer Publishing Company, Incorporated, New York, NY, 2013

R. 3 Regan, A.C. (1999), Review of Information Systems in Logistics and Transportation, Bernard Tilanus (ed), *Transportation Research Part A*, Vol 33 A, No 6, pp. 478-480.

R.2 Regan, A.C. (2002), Review of Designing and Managing the Supply Chain, Simchi-Levi, Kaminski and Simchi-Levi, *Transportation Science*, 36(3) p 364.

R. 1 Regan, A.C. (2003), Review of Handbook of Logistics and Supply-Chain Management, *Transportation Research*, 37 (2) pp 189 – 190.

Papers in Conference Proceedings (invited)

Golob, T.F. and A.C. Regan (2000), Impacts of Urban Congestion on Freight Operations: Perceptions of Trucking Industry Managers, proceedings of the Entretiens J. Cartier, Montreal, October, 2000.

Extended Abstracts

Regan, A.C. (2012), Cyber-Physical Transportation Systems: Promise and Challenges, Invited Position Paper, 1st International Workshop on Reliable CyberPhysical Systems, WRCPS 2012, University of California, Irvine, October 2012

Regan, A.C., Mahmassani, H.S. and P. Jaillet (1998), Dynamic Re-Sequencing and En-route Diversion Strategies for Carrier Fleet Operations: Simulation Investigation, *preprints of the TRISTAN III conference*, San Juan PR, June.

Selected Presentations

Warehouse Automation, University of Washington, Civil and Environmental Engineering Department, May 2022

Robots and Warehouses, MIT Center for Logistics and Transportation, May 2021

Matching Mechanisms for Congestion Pricing, MIT Center for Logistics and Transportation, March 2020.

Ethical Concerns in Emerging Transportation Industries, Invited Presentation, Transportation Research Forum Special On-line meeting, March 2020.

Ethical Considerations of Mobility-As-A-Service Operations, George Mason University, September, 2019

Ethical Considerations of Mobility-As-A-Service Operations, Texas A&M University, August, 2019

Problem based learning in Business and Engineering Education, National Chung Hsing University, Taichung, Taiwan, April 2019

Microtransit and Micromobility, National Chung Hsing University in Taichung, Taiwan, 2019

Emerging Trends in Microtransit and Micromobility, National Cheng Kung University, Taiwan, April 2019.

Emerging Trends in Microtransit and Micromobility: benefits to consumers, a few promising directions and many terrible ideas, VIP speaker, COTA International Conference of Transportation Professionals in Nanjing, China in July, 2020

Big Data & Emerging Vehicle Technology, Bejing University of Technology, July 2020

Managing Drone Swarms for Urban and Emergency Response Operations, National University of Singapore, March, 2019

Managing Drone Swarms for Urban and Emergency Response Operations, at Hong Kong Polytechnic University (PolyU), February, 2019

Surprising Opportunities for Sustainability in Transportation, Invited Talk, University College London, December 2016

Computational Problems in Transportation and Logistics, Invited Talk, Aalto University, Finland, September, 2016

Integration of crowdsourced and traditional data for route analysis and route finding for pedestrians with disabilities, Transportation Research Forum, Toronto, April, 2016

A Safety Perception Indicator for Vulnerable Road Users In Urban Environments, Transportation Research Forum, Toronto, April, 2016

Computation Problems in Auctions, Invited Talk, Arizona State University, February, 2016

Computational Problems in Auctions with Applications in Transportation and Logistics, Invited Talk, Center for Transport Studies, University College London, December, 2015

Computation Problems in Auctions, Invited Talk, UCI Department of Computer Science, November, 2105

From Vehicles to What?, Invited Talk, SAE COMVEC, October, 2015.

Transformational Technologies on the Transportation Horizon: Topics Every Transportation Engineer Should Know, Invited Talk, Texas A&M University, March 2015.

Transformational Technologies and Logistics Systems, Invited Talk, Inha University, Asia Pacific School of Logistics, November, 2014

Transformational Technologies and Logistics Systems, Korean Aerospace University, November 2014

The Role of Public Agencies in the Adoption of Advanced Transportation Technologies, Invited Talk, Korean Korea Institute of Civil Engineering and Building Technology, November, 2014

Transformational Technologies on the Transportation Horizon, Invited Keynote Talk, Joint National Academy of Engineering/Chinese National Academy of Engineering IT 2020 Conference, Beijing, October 2014

Transformational Technologies on the Transportation Horizon, Invited Talk, Cal Poly San Luis Obispo, October, 2014.

Impediments to the Implementation of Ad Hoc Vehicular Networks for Improved Road Safety, Imperial College London, July, 2014

Vehicular Ad Hoc Networks: Finally a Reality? Transportation Research Forum, San Jose, CA, March 2014

Prioritization, Inventory Planning and Budgeting for Road Management Resources: A Case Study of South Korea, Transportation Research Forum, San Jose, CA, March 2014

Modeling Environmental Impacts and Adoption of Alternative Fuel Vehicles in Advancing the State of Freight Transportation, Part 1: Network and Logistics Modeling, Invited Presentation, Transportation Research Board Meeting, Washington, DC, January, 2014

Parallel and distributed computing for large-scale transportation network design problems, University of Maryland, September, 2013.

Current Ideas and Issues Related to Cyber-Physical Transportation Systems, 1st International Workshop on Reliable CyberPhysical Systems, WRCPS 2012, University of California, Irvine, October 2012

Providing a basic Operations Research Curriculum in the Absence of a formal OR program, NSF workshop in Women in IE Academic, Istanbul, Turkey, June 2012

Computational Issues for Transportation Modeling, Presented at Texas A&M University, April 2012

Resource Location and Relocation Models with Forecasting for Wildland Fire Planning, Presented at the University of Southern California, May, 2011

Broadcasting in Ad Hoc Vehicular Networks, Presented at the University of Michigan, Dearborn, October 2009.

Current issues in modeling of logistics systems, Presented at Northwestern University, August 2009

Data for Freight Decision Making, Presented at the 2009 meeting of the National Urban Freight Conference, Long Beach, CA.

Long Haul Freight Network Design Using Shipper-Carrier Freight Flow Prediction: A California Network Improvement Case Study, Presented at the 2009 meeting of the Transportation Research Board, Washington DC, January 2009.

Heuristics for Freight Procurement Auctions with Carrier Capacity and Shipper Side Constraints, Presented at the 2009 meeting of the Transportation Research Board, Washington DC, January, 2009.

Prioritization of Potential Alternative Truck Management Strategies using the Analytical Hierarchy Process, Presented at the 2009 meeting of the Transportation Research Board, Washington DC, January 2009.

Freight Transportation Contracting Under Uncertainty, Presented at the 2009 meeting of the Transportation Research Board, Washington DC, January 2009.

Wireless Networks for Car-and-Ride Sharing Systems, Assessment of 802:11 Wi-Fi, Presented at the 2009 meeting of the Transportation Research Board, Washington DC, January 2009.

University of California, Irvine, Research Symposium, Invited Panel on Workforce Issues in the Technology Sector, May 2005

Women in Technology in the US, recent progress and continuing challenges, Presented at the first annual women in Leadership Conference, Tainan Women's College of Business and Technology, Tainan, Taiwan, May 2005

Issues in the US Logistics Industries, Invited Presentation, National Cheng Kung University, Tainan, Taiwan, May 2005

Truck-Involved Crashes And Traffic Levels On Urban Freeways, Presented at the 84th meeting of the Transportation Research Board, Jan, 2005

Freight Transportation Electronic Marketplaces: A Survey Of The Industry And Exploration Of Important Research Issues, Presented at the 84th meeting of the Transportation Research Board, Jan, 2005

Capacity Modeling in Transportation: A Multimodal Perspective, Presented at the 84th meeting of the Transportation Research Board, Jan, 2005

A Bid Analysis Model with Business Constraints for Transportation Procurement Auctions, Presented at the 84th meeting of the Transportation Research Board, Jan, 2005

Rule-based Price Discovery Methods in Transportation Procurement Auctions, Informs Conference on Revenue Management and Pricing, June 2004

Opportunities and Challenges for New Logistics Professionals, Invited Presentation, Beijing Jiaotong University, May, 2004

Bidding and Bid Analysis Problems in Combinatorial Auctions for the Procurement of Transportation Service Contracts, the 2004 International Conference on Logistics, Beijing, May 2004

Truck-Involved Crashes And Traffic Levels On Urban Freeways, presented at the 2004 meeting of the Transportation Research Board, January, 2004

An Auction Based Collaborative Carrier Network, presented at the 2004 meeting of the Transportation Research Board.

Trucking Industry Demand for Urban Shared Use Freight Terminals, presented at the 2004 meeting of the Transportation Research Board, January, 2004

Issues In Emerging Home Delivery Operations, presented at the 2004 meeting of the Transportation Research Board, January, 2004

Current Challenges for Intermodal Freight Transport and Logistics in Europe and the US, presented at the 2004 meeting of the Transportation Research Board, January, 2004

Approximation Algorithms for the Bid Valuation and Structuring Problem in Combinatorial Auctions for the Procurement of Freight Transportation Contracts, presented at the 2004 meeting of the Transportation Research Board, January, 2004

Stochastic And Dynamic Yield Management when Aircraft Assignments are Subject to Change, presented at the 2004 meeting of the Transportation Research Board, January, 2004

Information Technology adoption and use in non-integrated Air Cargo Operations, presented at the 2004 meeting of the Transportation Research Board, January, 2004

Combinatorial Auctions for Transportation Service Procurement: An Examination of Carrier Bidding Policies, Presented at the 2003 meeting of the IATBR, Luzern, Switzerland, August, 2003

Surveying and Modelling Trucking Industry Perceptions, Preferences and Behaviour, presented at the 2003 meeting of the IATBR, Luzern, Switzerland, August, 2003

Emerging Issues in Short and Long Term Contracting for Trucking Services, invited presentation, University of Southern California, September, 2003.

Bidding in Combinatorial Auctions– Solving the Routing Sub-Problems, ROUTE 2003, Denmark

Combinatorial Auctions for Freight Transportation Service Contracting: Industry and Policy Implications, presented at the 2003 UCTC student conference, February, 2003.

Trucking Industry Perceptions of Traveler Information for Drivers Using Wireless Internet-enabled Devices, presented at the 2003 meeting of the Transportation Research Board, Jan, 2003.

Two Time Window Discretization Methods for the Multiple Traveling Salesman Problem with Time Windows, presented at the 2003 meeting of the Transportation Research Board, Jan, 2003.

Traffic Congestion and Trucking Managers' Demand for Routing and Scheduling Software, presented at the 2003 meeting of the Transportation Research Board, Jan, 2003.

Risks and Prevention Measures in Logistics Outsourcing, presented at the 2003 meeting of the Transportation Research Board, Jan, 2003.

Combinatorial Auctions for Transportation Service Procurement: The Carrier Perspective, presented at the 2003 meeting of the Transportation Research Board, Jan, 2003.

Traffic Congestion and Trucking Managers' Demand for Routing and Scheduling Software, presented at the 2003 meeting of the Transportation Research Board, Jan, 2003.

Rebate, Returns, and Price Protection Polices in Supply Chain Coordination, presented at the 2002 meeting of INFORMS, November 2002.

A Priori Routing Policies for Dynamic and Stochastic Traveling Salesman Problems, presented at the 2002 meeting of INFORMS, November 2002.

Time-window Discretization Methods for the Multiple Traveling Salesman Problem with Time Windows, presented at the 2002 meeting of INFORMS, November 2002.

Revisiting the Probabilistic Traveling Salesman Problem: An examination of new heuristics, Presented at IFORS, Edinburgh, July, 2002

Analytical Examination of Heuristics for the Probabilistic Traveling Salesman Problem, Presented at IFORS, Edinburgh, July 2002

Combinatorial Auctions from the Carrier Perspective, , Presented at IFORS, Edinburgh, July 2002 Rebate, Returns, and Price Protection Polices in Supply Chain Coordination, Optimization Days, Montreal, May, 2002

Analytical Examination of a Heuristic for the Probabilistic Traveling Salesman Problem, Optimization Days, Montreal, May 2002

Location and Allocation Routing of Mobile Medical Units Optimization Days, Montreal, May, 2002

Combinatorial Auction in Procurement of Transportation Services from Carriers' Perspective, Optimization Days, Montreal, May 2002

A priori, rolling horizon and on-line optimization for dynamic and stochastic routing and scheduling, invited presentation, NSF workshop on real-time fleet management, Long Beach, April 2002

Dynamic and Stochastic Routing and Scheduling: Recent Developments and On-going Research, invited presentation, University of California, Berkeley, April, 2002.

Dynamic and Stochastic Routing and Scheduling: Recent Developments and On-going Research, invited presentation, University of California, Berkeley, March, 2002.

Dynamic and Stochastic Routing and Scheduling: Recent Developments and On-going Research, invited presentation, Northwestern University, February, 2002.

Dynamic and Stochastic Routing and Scheduling: Recent Developments and On-going Research, invited presentation, University of Southern California, February, 2002.

An Asymptotically Optimal Algorithm for the Dynamic Traveling Repair Problem, presented at the 81st meeting of the Transportation Research Board, January, 2002

The Relative Performance of Heuristics for the Dynamic Traveling Salesman Problem presented at the 81st meeting of the Transportation Research Board, January, 2002

Dynamic and Stochastic Network Optimization: Recent Developments and On-going Research, Presented at the University of Texas, September, 2001

Impacts of Information Technology on Freight Transportation Optimization, presented at the 2001 meeting of the ITSC, Oakland, California, August, 2001.

The Irvine ITS California Test Bed, presented at the 2001 meeting of the ITSC, Oakland, California, August, 2001.

Dynamic and Stochastic Fleet Management, presented at the 4th international TRISTAN meeting, Sao Miguel, Portugal, June, 2001.

Impacts of Information Technology in Transportation Logistics, presented at the 4th international TRISTAN meeting, Sao Miguel, Portugal, June 2001.

Carrier perceptions of the Usefulness of Various Sources of Information, presented at the 80th meeting of the Transportation Research Board, January, 2001

An Industry in Transition: Third Party Logistics in the Information Age, presented at the 80th meeting of the Transportation Research Board, January, 2001

Impacts of Information Technology on Personal Travel and Commercial Vehicle Operations: Research Challenges and Opportunities, presented at the 80th meeting of the Transportation Research Board January, 2001

Assignment models for local truckload trucking problems with stochastic service times and time window constraints, presented at the 80th meeting of the Transportation Research Board, January, 2001.

Impacts of Urban Congestion on Freight Operations: Perceptions of Trucking Industry Managers, presented at the Entretiens J. Cartier, Montreal, October, 2000.

Freight demand and shipper behavior modeling: state of the art, directions for the future, resource paper presented at the 2000 meeting of the International Association of Travel Behavior Researchers, Gold Coast, Australia, July, 2000.

An Approximation Algorithm for Real-Time Application to Time-Constrained Vehicle Routing & Scheduling, INFORMS, Salt Lake City, May, 2000.

Use & Usefulness of Traffic Information Sources in Commercial Vehicle Operations: The Trucking Industry Perspective, INFORMS, Salt Lake City, May, 2000.

An Integer Programming Formulation of the Probabilistic TSP in which All Nodes have Equal Probability of Coverage, INFORMS, Salt Lake City, May, 2000.

An Algorithm for the Local Truckload Vehicle Routing Problem with Strict Time Window Constraints, presented at the 79th meeting of the Transportation Research Board, Washington DC, January 2000.

Mixed Global and Locally Optimal Heuristics for Local Truckload Trucking Operations with Strict Time-Windows, presented at the 79th meeting of the Transportation Research Board, Washington DC, January 2000.

Freight Industry Attitudes Towards Policies to Reduce Congestion, presented at the 79th meeting of the Transportation Research Board, Washington DC, January 2000.

Impacts of Highway Congestion on Freight Operators: Perceptions of Trucking Industry Managers, presented at the 79th meeting of the Transportation Research Board, Washington DC, January 2000.

Local Truckload Vehicle Routing with Strict Time-Window Constraints, INFORMS, Philadelphia, November, 1999.

The Dynamic Traveling Repairman Problem: New Formulations, INFORMS, Philadelphia, November, 1999.

Modeling issues in Dynamic Fleet and Freight Management, Invited presentation, University of California, San Diego, Department of Mathematics, June, 1999.
Real-Time Routing and Assignment for Trucking Operations, Optimization Days, Montreal, May, 1999.

Establishing the Industry Baseline, panel discussion, Cargo Network Services Conference, May, 1999.

Issues in Routing and Assignment for Trucking Operations, invited presentation, University of California, Irvine, April, 1999.

Freight Industry Attitudes Towards Policies to Reduce Congestion invited presentation, Portland State University, April, 1999.

Dynamic Routing and Assignment for Trucking Operations, invited presentation, University of Southern California, March, 1999.

Routing and Assignment for Local Trucking Operations Supporting Intermodal Operations, Presentation to Executives and Managers of JB Hunt Transport, Inc., Irvine, February, 1999.

Real-Time Routing and Assignment for Trucking Operations, invited presentation, University of Texas at Austin, February, 1999.

Freight Industry Attitudes Towards Policies to Reduce Congestion, presented at the 78th meeting of the Transportation Research Board, January, 1999.

Fleet Operators Perceptions of Congestion Problems and the Application of Advanced Technologies: Results from a Survey of 1200 Companies Operating in California, presented at the 78th meeting of the Transportation Research Board, January, 1999.

Fleet Operator Perceptions of Network Conditions & Variability: Implications for Operational & Planning Model Development, presented at the fall meeting of INFORMS, October, 1998.

Dynamic Assignment & Load Acceptance in Local & Long-Haul Pickup & Delivery Operations, presented at the fall meeting of INFORMS, October, 1998.

Dynamic Re-Sequencing and En-route Diversion Strategies for Carrier Fleet Operations: Simulation Investigation, TRISTAN III, San Juan PR, June, 1998.

Development and Evaluation of Dynamic Fleet Management Systems, Invited presentation, University of California, Berkeley, Spring Transportation Symposium, Feb, 1998.

Implementation and Evaluation of Dynamic Fleet Management Systems, Invited presentation, Federal Express Corporation, Memphis, January, 1998.

Evaluation of Dynamic Fleet Management Systems: A Simulation Framework, presented at the 77th meeting of the Transportation Research Board, January, 1998.

Evaluation of Operational Strategies for Dynamic Fleet Management, presented at the fall meeting of INFORMS,

October, 1997.

Operational Strategies for Dynamic Dispatching of Carrier Fleet Operations, presented at the fall meeting of INFORMS, October, 1997.

Dynamic Fleet and Freight Management, Invited Presentation, University of Texas, Austin, September, 1997.

Carrier Fleet Operations Under Real-Time Information: Dynamic Assignment and The Effect of Congestion, presented at the spring meeting of INFORMS, May, 1997.

Carrier Fleet Operations Under Real-Time Information: Insights and Applications, presented at the fall meeting of INFORMS, November, 1996.

Trucking Operations Under Real-Time Information: Insights and Applications, presented at the meeting of the International Federation of Operational Research Societies (IFORS), Vancouver, BC, July 1996.

Real Time Information For Improved Efficiency of Commercial Vehicle Operations: Operational Considerations And Simulation Insights, invited presentation, University of California, Irvine, May, 1996.

Fleet Management Strategies for Trucking Operations Under Real-Time Information, presented at the spring 1996 meeting of INFORMS, April, 1996.

Real Time Information for Improved Efficiency of Commercial Vehicle Operations: Operational Considerations and Simulation Insights, invited presentation, Texas A&M University, April, 1996.

Real Time Information for Improved Efficiency of Commercial Vehicle Operations: Operational Considerations and Simulation Insights, invited presentation, Georgia Institute of Technology, March, 1996.

Real Time Information for Improved Efficiency of Commercial Vehicle Operations: Operational Considerations and Simulation Insights, invited presentation, Northwestern University, February, 1996.

Real Time Information for Improved Efficiency of Commercial Vehicle Operations: Operational Considerations and Simulation Insights, invited presentation, University of Maryland, February, 1996.

Real Time Information for Improved Efficiency of Commercial Vehicle Operations: Operational Considerations and Simulation Insights, invited presentation, University of Kentucky, February, 1996.

Real-Time Information For Improved Efficiency of Commercial Vehicle Operations, presented in the seminar on doctoral student research at the 75th annual meeting of the Transportation Research Board, January, 1996.

Dynamic Fleet Management for Trucking Operations, presented at the fall 1995 meeting of INFORMS, October, 1995.

Carrier Fleet Management Models Under Real-Time Information, presented at and published in the proceedings of the EURO Working Group on Transportation, Barcelona, Spain, September, 1995.

Dynamic Vehicle Allocation Under Real Time Information: Operational Considerations and Potential Efficiencies, Fourth International Conference on Applications of Advanced Technologies in Transportation Engineering, Capri, Italy, June, 1995.

Demand Responsive Fleet Management: Problem Overview and Simulation Insights, Invited presentation, University of California at Davis ITS seminar series, June, 1995.

Dynamic Vehicle Allocation Under Real Time Information, presented at the spring 1995 meeting of INFORMS, Los Angeles, April, 1995

Emerging Technologies in Automatic Vehicle Location and Two-way Communication Systems for Common Carrier Operations, presented at the 1993 International Motor Carrier Symposium, May, 1993.