

**Contact Information**

Lally School of Management  
Rensselaer Polytechnic Institute  
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**Education**

The University of Texas at Austin, Austin, TX  
Ph.D. Information, Risk, and Operations Management, 2019

New York University, New York, NY  
M.Phil. Operations Management, 2009

University of Chile, Santiago, Chile  
M.S. Operations Management, 2005  
B.S. Industrial Engineering, 2003

**Academic Appointments**

Rensselaer Polytechnic Institute, Lally School of Management  
Assistant Professor of Supply Chain and Analytics, Aug 2022 - present

University of Illinois Urbana-Champaign, Gies College of Business  
Visiting Assistant Professor, Jan 2022 - July 2022  
Postdoctoral Research Associate, 2020 - 2021

The University of Texas at Austin, McCombs School of Business  
Instructor, 2015-2016  
Research Assistant, 2010 - 2016

University of Chile, Department of Industrial Engineering  
Instructor, 2007  
Research Assistant, 2003 - 2006

University of Los Andes, Faculty of Engineering and Applied Sciences  
Assistant Professor, 2005 - 2007

**Other Appointments**

RSG Media, New York, NY  
Vice President of Data Science, 2016 - 2019  
Optimization Scientist, 2009 - 2010

BNSF Railway, Fort Worth, TX  
Optimization Scientist Intern, 2011

XEROX, Santiago, Chile  
Simulation Engineer Intern, 2003

## Research Interests

Sustainability, supply chain management, media analytics, data-driven optimization, machine learning, econometrics.

## Working Papers

Souyris, S., J. Duan, A. Balakrishnan, V. Rai. Diffusion of Residential Solar Power Systems: A Dynamic Discrete Choice Approach. Submitted. Available at SSRN: <https://ssrn.com/abstract=4301666>.

Ivanov, A., Z. Tacheva, S. Souyris, A. Alzaidan, S. Seshadri, and A. C. III England. Informational Value of Visual Nudges During Crises: Improving Public Health Outcomes Through Social Media Engagement Amid Covid-19. Major revision.

Hao, S., Y. Xu, U. K. Mukherjee, S. Souyris, S. Seshadri, A. Ivanov, M. E. Ahsen Hotspots for Emerging Epidemics: Multi-Task and Transfer Learning over Mobility Networks. Available at SSRN: <https://ssrn.com/abstract=3858274>.

Ivanov, A., S. Bose, S. Hao, U. K. Mukherjee, S. Seshadri, R. Watkins, A. C. III England, S. Souyris, M. E. Ahsen, J. Suriano. COVID-19 Test-to-Stay Program for K-12 Schools: Opt-In Versus Opt-Out Policies.

Souyris, S., and J. Miranda. Scheduling Shows on Broadcast Television.

## Journal Publications

Souyris, S., S. Seshadri, and S. Subramanian (2023) Scheduling Advertisements on Cable Television. *Operations Research* 0(0). **INFORMS RM&P Section Practice Award 2022, First prize.**

Souyris, S., S. Hao, S. Bose, A.C. England III, A. Ivanov, U. K. Mukherjee, and S. Seshadri (2022) Detecting and mitigating simultaneous waves of COVID-19 infections. *Nature Scientific Reports*, 12, 16727.

Mukherjee, U. K., S. Bose, A. Ivanov, S. Seshadri, S. Souyris, P. Sridhar, R. Watkins, and Y. Xu (2021) Evaluation of reopening strategies for educational institutions during COVID-19 through agent based simulation. *Nature Scientific Reports*, 11, 6264.

Alarcón, D. Saure, A. Weintraub, R. Wolf-Yadlin, G. Zamorano, L. Ramírez, G. Durán, M. Guajardo, J. Miranda, M. Ramírez, M. Siebert, and S. Souyris (2017) Operations Research Transforms Scheduling of Chilean Soccer Leagues and South American World Cup Qualifiers. *INFORMS Journal on Applied Analytics*, 47: 52–69. **INFORMS Franz Edelman Award 2016, Finalist.**

Cortés, C. E., M. Gendreau, L. M. Rousseau, S. Souyris, and A. Weintraub (2014) Branch-and-Price and Constraint Programming for Solving a Real-Life Technician Dispatching Problem. *European Journal of Operational Research*, 238 (1): 300–312.

Souyris, S., C. E. Cortés, F. Ordoñez, and A. Weintraub (2013) A Robust Optimization Approach to Dispatching Technicians under Stochastic Service Times. *Optimization Letters*, 7: 1549–1568.

Durán, G., M. Guajardo, J. Miranda, D. Sauré, S. Souyris, A. Weintraub, and R. Wolf (2007) Scheduling the Chilean Soccer League by Integer Programming. *INFORMS Journal on Applied*

### Conference Proceedings and Other Academic Publications

Bose, S., S. Souyris, A. Ivanov, U. Mukherjee, S. Seshadri, and Y. Xu (2021) [Control of Epidemic Spreads via Testing and Lock-Down](#). *60th IEEE Conference on Decision and Control*, pp. 4272-4279.

Noronha, T. F., C. C. Ribeiro, G. Durán, S. Souyris, and A. Weintraub (2007) [A Branch-and-Cut Algorithm for Scheduling the Highly-Constrained Chilean Soccer Tournament](#). *Practice and Theory of Automated Timetabling VI, Lecture Notes in Computer Science*, 3867:174–186.

C. E. Cortés, F. Ordoñez, Souyris, S., and A. Weintraub (2007) [Routing Technicians under Stochastic Service Times: A Robust Optimization Approach](#). *TRISTAN VI: The Sixth Triennial Symposium on Transportation Analysis*.

Durán, G., M. Guajardo, J. Miranda, D. Sauré, S. Souyris, A. Weintraub, A. Carmash, and F. Chaigneau (2005) [Programación Matemática Aplicada al Fixture de la Primera División del Fútbol Chileno](#). *Revista Ingeniería de Sistemas Volumen XIX*:29-48.

A. Weintraub, C. E. Cortés, and Souyris, S. (2004) [Constraint Programming and Column Generation Methods to Solve the Dynamic Vehicle Routing Problem for Repair Services](#). *TRISTAN V: The Fifth Triennial Symposium on Transportation Analysis*.

### Publications in Magazines and Media

Souyris, S. [¿Cómo pueden las cadenas televisivas competir en la era Netflix?](#) *El Mercurio*, Martes, 20 de Marzo de 2018.

Souyris, S. [Opportunities for Linear Television Using Data Science](#). *Media and Entertainment Journal*, Spring 2017.

### Honors and Awards

First prize INFORMS Revenue Management and Pricing Section Practice Award, 2022.

Named Dean R. Wellington '83 Teaching Professorship in Management, Rensselaer Polytechnic Institute, 2022.

Second place Global BIGGIES Awards, Excellence in the Use of Predictive Analytics for RSG Log Optimization project, 2018.

INFORMS Franz Edelman Laureate 2016.

The University of Texas at Austin, Graduate School, Dissertation Writing Fellowship, 2016.

Fellowship for Graduate Studies, The University of Texas at Austin, McCombs School of Business, 2010-2015

Doctor Cooper Fellowship for Strong Doctoral Student Research, The University of Texas at Austin, McCombs School of Business, 2011.

Finalist **EURO Excellence in Practice Award** 2009.

Fellowship Graduate Studies, New York University, Stern School of Business, 2007-2008.

Chilean government fellowship, Conicyt (declined), 2007.

## Grants

Co-PI, [Gies College of Business](#). How to Facilitate Business Continuity by Addressing Supply Chain Constraints Caused by COVID-19?, 2021.

Co-PI, [Jump ARCHES](#). How to design and operate end-to-end vaccine deployment using social media, addressing supply chain allocation constrains, and utilizing telemedicine?, 2021.

Co-PI, [C3.ai Digital Transformation Institute](#), grant to mitigate COVID-19 and future pandemics, 2020.

## Invited Seminars

2022: University of Chile, Department of Management and Information Systems; University of Chile, Faculty of Economics and Business, Keynote speaker IICG Conference; RPI, Department of Civil and Environmental Engineering; NHH, Norwegian School of Economics.

2021: RPI, Lally School of Management; Drexel University, LeBow College of Business; Rutgers School of Business; University of Massachusetts Boston, College of Management. Purdue, Krannert School of Management.

2020: UIUC, Gies College of Business.

2013: University of Chile, Department of Industrial Engineering.

2008: NYU, Stern School of Business.

## Service Activities

Referee for: POM, Management Science, Operations Research Letters.

Session Chair: POMS 2022, 2023; INFORMS 2019.

## Memberships

### INFORMS

Energy Natural Resources & Environment ([ENRE](#)) Section

Revenue Management and Pricing ([RMP](#)) Section

Manufacturing and Service Operations Management ([MSOM](#)) Society

Transportation Science and Logistics ([TSL](#)) Society

Production and Operations Management Society ([POMS](#))

## Teaching Experience

[Lally School of Management Rensselaer Polytechnic Institute](#) (Fall 2022 - present)

- Foundations of Data Science (MBA level).

[Gies College of Business, University of Illinois Urbana–Champaign](#) (Fall 2020 to Spring 2022).

- Business Analytics II (Undergraduate level).
- Fundamentals of Operations Management (Undergraduate level).

[McCombs School of Business, The University of Texas at Austin](#) (Fall 2012, Fall 2015).

- Elementary Business Statistics (Undergraduate level).
- Operations Management (Undergraduate level).

[Department of Industrial Engineering, University of Chile](#) (Fall 2007).

- Optimization (Undergraduate level).

Faculty of Engineering and Applied Sciences, University of Los Andes (2006-2007).

- Stochastic Models (Undergraduate level).
- Optimization (Undergraduate level).

### **Selected Conference Presentations**

*Diffusion of Residential Solar Power Systems: A Dynamic Discrete Choice Approach.* Workshop in Management Science January 2023, Puerto Varas, Chile.

*Electric vehicles and solar panels co-adoption via diffusion models.* EURO 2022, Espoo, Finland; POMS International 2022, Budapest, Hungary; MSOM 2022, Munich, Germany.

*9 Years of Substantial Revenue Increase by Scheduling Advertising Optimally and Seamlessly on Cable Television.* INFORMS Revenue Management and Pricing Section 2022, Practice Award Final, Virtual.

*Informational Value of Visual Nudges During Crises: Improving Public Health Outcomes Through Social Media Engagement Amid Covid-19.* POMS 2022, Virtual.

*Dynamic Resource Management in Response to Pandemics.* 2022 C3.ai DTI Symposium.

*Peer Effects in the Diffusion of Solar Panels: a Dynamic Discrete Choice Approach.* INFORMS 2019, Seattle, WA; INFORMS 2021, Anaheim, CA.

*Machine Learning and Large Scale Dynamic Discrete Choice Models.* INFORMS 2019, Seattle, WA.

*O.R. Transforms Scheduling of Chilean Soccer Leagues and South American World Cup Qualifiers.* INFORMS Analytics 2016, Edelman Award Final, Orlando, FL.

*Structural Estimation of New Technology Diffusion.* POMS 2015, Washington, DC; INFORMS 2014, San Francisco, CA; MSOM 2014, Seattle, WA; IFORS 2014, Barcelona, Spain; POMS 2014, Atlanta, GA.

*Ad Placement Problem: A Robust Optimization Approach.* INFORMS 2012, Phoenix, AZ; INFORMS 2010, Austin, TX.

*Locomotive Assignment Problem.* INFORMS 2012, Phoenix, AZ; INFORMS 2011, Charlotte, NC.

*Constraint Programming and Branch and Price for a Joint Depot Location, Fleet Design and Routing Problem.* INFORMS 2007, Seattle, WA.

*A Robust Optimization Approach to Dispatching Technicians under Stochastic Service Times.* CLAIO 2006, Montevideo, Uruguay; ISMP 2006, Rio de Janeiro, Brazil.

*Branch and Price Combined with Constraint Programming to Solve a Technician Dispatch Problem.* CORS/Optimization Days 2006, Montreal, Canada; INFORMS 2004, Denver, CO.

### **Summer Schools and Other Training**

2019: Econometric Society Summer School in Dynamic Structural Econometrics, Booth School of Business and the Becker Friedman Institute for Economics at the University of Chicago.

2016: Databricks Machine Learning in Apache Spark week training.

2004: ELAVIO X (Operations Research Summer School for Young Latin American Scholars), Montevideo, Uruguay.

2003: ELAVIO IX (Operations Research Summer School for Young Latin American Scholars), Vaqueiras, Córdoba, Argentina.