

Mohsen Bahrami

RESEARCH SCIENTIST
MIT CONNECTION SCIENCE
INSTITUTE FOR DATA, SYSTEMS, AND SOCIETY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

77 Massachusetts Ave, E17-389
Cambridge, MA 02139, USA
bahrami@mit.edu
+1-857-540-8508

ACADEMIC & RESEARCH EXPERIENCE

Massachusetts Institute of Technology
MIT Connection Science, SSRC, IDSS
Research Scientist

Cambridge, MA

Nov 2022 - Present

Supervisor: Prof. Alex ‘Sandy’ Pentland

- Have been developing and extending the ‘**Atlas of Opportunity**’ as an interactive online GIS platform that aims to democratize people’s access to various state-of-the-art data-driven analytics tools, increase digital literacy, and uncover various opportunities for communities to help them revive and flourish.
- Working with students and researchers with diverse specializations and backgrounds located in seven countries from four continents.

Massachusetts Institute of Technology
MIT Connection Science, SSRC, IDSS
Postdoctoral Research Associate

Cambridge, MA

Nov 2019 - Nov 2022

Supervisor: Prof. Alex ‘Sandy’ Pentland

- Have been conducting various research projects in computational social science context. Mainly focused on topics concerning human behavior such as mobility, social interactions and influence, commercial activity, and how their behavior can impact the economic, wellness and health outcomes.
- I have been producing publications, starting new projects, coordinating and training groups of junior graduate and undergraduate students to work on various projects.
- As a key member of the ‘**MIT Big Data Living Lab**’ in Adelaide, Australia (<https://dti.sa.gov.au/industry/big-data-living-lab>) I have been mainly working on the projects that aim to determine the most effective ways that stimulates the economic growth and improve residents lifestyle in South Australia.
- Developed the ‘**Atlas of Opportunity**’ website that aims to help local small businesses, available at <https://opportunity.mit.edu/>. This website is being used by ‘South Australia Small business commission’ for advisory purposes and individuals who are planning to start or expand their businesses and need detailed information that could potentially help them make informed decisions.
- Worked as project advisor of the ‘**VoyageViewer**’ platform. VoyageViewer is an online and open source interactive tool, specially designed to study human mobility and migration.
- Working with students and researchers with diverse specializations and backgrounds located in seven countries from four continents.

Sabani Business School, Sabanci University
Postdoctoral Research Fellow

Istanbul, Turkey

Sep 2018 - Nov 2019

Supervisor : Prof. Burcin Bozkaya

- Conducted research on sales forecasting, market potential prediction, and economic well-being evaluation using spatio-temporal and behavioral features
- Developed mobility models that are capable of predicting future sales for small businesses
- Contributed to the research project on relating mobility behavior to health outcomes, investigating how the visits to fast-food outlets can predict obesity and cardiovascular disease prevalence at neighborhood level.

Massachusetts Institute of Technology
MIT Media Lab, Human Dynamics Group
Visiting Researcher

Cambridge, MA

Oct 2017 - Apr 2018

Advisors : Prof. Alex ‘Sandy’ Pentland, Prof. Burcin Bozkaya, & Prof. Selim Balcisoy

- Conducted research on understanding urban economics and financial well-being using big data analytics under supervision of Prof. Alex ‘Sandy’ Pentland.
- Developed a gravity model of human flows that can accurately predict the flows in mobility network taking into account the diversity of consumption and ease of access to the amenities.
- Worked as MIT team member in Data for Refugee (D4R) challenge. Investigated multidimensional integration of Syrian refugees in Turkey, using mobile phone metadata and won an honorable mention award in the Social Integration category.

Behavioral Analytics and Visualization Lab, Sabanci University
Ph.D. Research

Istanbul, Turkey

May 2015 - Nov 2019

Advisors : Prof. Burcin Bozkaya & Prof. Selim Balcisoy

- Worked as a key member of the lab research team since it was founded.
- Led research projects on behavioral analytics using large-scale datasets from finance, insurance, and telecommunication sectors.
- In a joint research with industry, developed a model that could predict the customers invoice payment and could recommend the actions that could potentially decrease the probability of default and delinquency.
- Used credit card transactions to validate the performance of the gravity models for customer patronage behavior.

RESEARCH INTERESTS

Behavioral Analytics, Business Analytics, Big Data Analytics, Social Networks, Supervised & Unsupervised Learning, Predictive Modeling.

RESEARCH COLLABORATION WITH INDUSTRY

Financial Organizations: MasterCard (AI Garage initiative), M&T Bank, BankSA-Westpac Australia, BBVA Bank Turkey and Mexico, Akbank Turkey.

Telcos, Location Intelligence, & IT Companies: Safegraph USA, DSpark-Optus Australia, Turktelekom, i2i Systems Turkey.

Manufacturing & Sales: Filli Boya Turkey, Tramontina Brazil, Althoff Chain Supermarket Stores Brazil.

REFEREED JOURNAL PUBLICATIONS

Bahrami, M., Boz, H. A., Suhara, Y., Bozkaya, B., Balcisoy, S., & Pentland, A. (2023). “Predicting merchant future performance using privacy-safe network-based features”, *Scientific Reports*, DOI: 10.1038/s41598-023-36624-0

Netto, C. S. F., **Bahrami, M.**, Brei, V. A., Bozkaya, B., Balcisoy, S., & Pentland, A. (2023). “Disaggregating Sales Prediction: A Gravitational Approach”, *Expert Systems with Applications*, 217, 119565.

Bahrami, M., Xu, Y., Tweed, M., Bozkaya, B., & Pentland, A. (2022). “Using Gravity Model to Make Store Closing Decisions: A Data Driven Approach”, *Expert Systems with Applications*, 205, 117703.

Maleki, M., **Bahrami, M.**, Menendez, M., & Balsa-Barreiro, J. (2022). “Social Behavior and COVID-19: Analysis of the Social Factors behind Compliance with Interventions across the United States”, *International Journal of Environmental Research and Public Health*, 19(23), 15716.

Suhara, Y., **Bahrami, M.**, Bozkaya, B., & Pentland, A. S. (2021). “Validating gravity-based market share models using large-scale transactional data”, *Big Data*, 9(3), 188-202.

Bahrami, M., Bozkaya, B., & Balcisoy, S. (2020). “Using Behavioral Analytics to Predict Customer Invoice Payment”, *Big Data*, 8(1), 25-37.

Chong, S. K.* , **Bahrami, M.*** , Chen, H., Balcisoy, S., Bozkaya, B., & Pentland, A., (2020). “Economic outcomes predicted by diversity in cities”, *EPJ Data Science*, 9(1), 17.

Ak, R., **Bahrami, M.**, & Bozkaya, B. (2020), “A Time-Based Model and GIS Framework for Assessing Hazmat Transportation Risk in Urban Areas”, *Journal of Transport & Health*, 19, 100943.

PROCEEDINGS

Chawla, A., Mulay, N., **Bahrami, M.**, Bishnoi, V., Katyal, Y., Moro, E., Saraswat, A., & Pentland, A. (2022), “Post-pandemic Economic Transformations in the United States of America”, *International Conference on Data Mining (ICDM). Workshop on Social Data Mining (SocDM2022)*, IEEE, 1186-1190.

Loaiza, I., South, T., Sanchez, G., Chan, S., Yu, A., Montes, F., **Bahrami, M.**, & Pentland, A. (2022), “Voyage Viewer: Empowering human mobility at a global scale”, *EuroVis Visual Analytics (EuroVA 2022)*.

Mulay, N., Bishnoi, V., Katyal, Y., **Bahrami, M.**, Moro, E., Saraswat, A., & Pentland, A. (2021), “Effects of Stimulus Payments on Consumer Spending During COVID-19 Pandemic”, *International Conference on Data Mining (ICDM). Workshop on Social Data Mining (SDM)*, IEEE, 873-877.

Horn, A.L., de la Haye, K., Moro, E., Wilson, J., Valente, T., Bozkaya, B., **Bahrami, M.** and A. Pentland (2020). “Objective Measurements of Food Environment Exposure and Access in Los Angeles from Big Mobility Data”, *Annals of Behavioral Medicine*, 54, S469-S469.

Boz, H. A., **Bahrami, M.**, Suhara, Y., Bozkaya, B., & Balcisoy, S. (2020). “An Exploratory Visual Analytics Tool for Multivariate Dynamic Networks”, *EuroVis Visual Analytics (EuroVA 2020)*.

Bahrami, M., Findik, Y., Bozkaya, B. & Balcisoy, S. (2018). “Twitter Reveals: Using Twitter Analytics to Predict Public Protests”, *Proceedings of NERCCS 2018: The First Northeast Regional Conference on Complex Systems, Binghamton, NY* (April 2018).

BOOK CHAPTERS

Loaiza Saa, I., Serena Chen, Sánchez Sarmiento, G. A., **Bahrami, M.**, & Pentland, A. (2022). “Voyage Viewer: A Visual Multivariate Dynamic Exploration Tool for Migration and Mobility Studies”, In “*Data Science for Migration and Mobility*” (pp. 267–288). British Academy.

Bakker, M. A., Piracha, D. A., Lu, P. J., Bejgo, K., **Bahrami, M.**, Leng, Y., ... & Bozkaya, B. (2019). “Measuring fine-grained multidimensional integration using mobile phone metadata: the case of Syrian refugees in Turkey”, In *Guide to Mobile Data Analytics in Refugee Scenarios* (pp. 123-140). Springer, Cham.

* This research won an ‘**honorable mention award**’ in Data for Refugee challenge (D4R).

PREPRINTS &
MANUSCRIPTS
UNDER REVIEW

Xu, Y., **Bahrami, M.**, & Pentland, A. “Temporal persistence of consumer behavioral shifts in response to the COVID-19 pandemic”, *R1 under review by Journal of Retailing and Consumer Services*.

Boz, H. A., **Bahrami, M.**, Balcisoy, S., Bozkaya, B., Mazar, N., Nicholas, A., & Pentland, A. “One City, Two Tales: Using Mobility Networks to Understand Neighborhood Resilience and Fragility during the COVID-19 Pandemic”, *under review by Nature Humanities and Social Sciences Communications*, available at <https://arxiv.org/abs/2210.04641>.

Bueno, B.G.B., Horn, A.L., Bell, B.M., **Bahrami, M.**, Bozkaya, B., Pentland, A., De la Haye, K. and Egido, E.M. (2022). “You are where you eat: Effect of mobile food environments on fast food visits”, *medRxiv* (2022), *R1 under review by Nature Communications*.

Horn, A. L., Bell, B. M., Bueno, B. G. B., **Bahrami, M.**, Bozkaya, B., Cui, Y., Woilson, J., Pentland, A., Moro, E., and de la Haye, K., “Investigating mobility-based fast food outlet visits as indicators of dietary intake and diet-related disease.” *medRxiv* (2021), *under review by The Journal of the American Medical Association (JAMA)*.

Bahrami, M., Findik, Y., Bozkaya, B. & Balcisoy, S. (2018). “Twitter Reveals: Using Twitter Analytics to Predict Public Protests”, *arXiv preprint arXiv:1805.00358*.

Hejazi, M. M., Golabi, F., **Bahrami, M.**, Kahroba, H., & Hejazi, M. S. (2022). “FMSClusterFinder: A new tool for detection and identification of clusters of sequential motifs with varying characteristics inside genomic sequences”. *bioRxiv* (2022).

MANUSCRIPTS
IN PREPARATION

Tohidi, A., **Bahrami, M.**, & Pentland, A.. “Understanding dynamics of restaurant foot-traffic recovery: A case study of the Covid-19 pandemic”.

Yoon, J., **Bahrami, M.**, Jung, WS., Balcisoy, S., Bozkaya, B., Pentland, A., & Ahn, YY. “Assessing Diversity of Business Categories in Commercial Districts and its Association with Merchants Revenue using Neural Embedding”.

GRANTS

MIT Sloan Latin America Office: Research funding for project entitled “Estimating Informal Income and Purchase Patterns in Colombia”. Amount: \$16,000.00 (2022).

Marketing Science Institute (MSI) Competition on “Learning from Disruption: New Connections, New Directions post-COVID”: Research funding to support the project “Dynamic Product Embedding For Heterogeneous Purchase Network: An Application To Omnichannel Midst And Post COVID Pandemic”. Amount \$10,400 (2021).

The Brazilian National Council for Scientific and Technological Development (CNPq): Funding to support the ‘Brazil Atlas of Opportunity’ project. Amount: R\$165,000.00 (2021).

Go2Gov SA: South Australian government’s grant for ‘Peak’, an early stage startup for proof of concept development. Amount: AUD 150K. Helped secure the grant as advisor (2021).

FAPERGS: Research Funding Agency of the State of Rio Grande do Sul, Brazil, “Development of a low-cost method for sales and demand forecasting based on spatial models”. Amount: R\$81,460.00 (2019).

TEACHING
INTERESTS

Business & Data Analytics, Data Mining, Machine Learning, Predictive Modeling, Probability and Statistics, Econometrics, Stochastic Processes.

TEACHING
EXPERIENCE

Sabanci Business School, Sabanci University *Istanbul, Turkey*
Course Title: Introduction to Data Analysis & Research in Business *Summer 2019*
Role: Course Instructor
Syllabus: [Available here](#)

Management Undergraduate and Business Analytics Minor Programs

- **Audience:** Sophomore and Junior students
- **Course Capacity:** 60 Students
- **Course Type:** Required Course
- **Area Elective course** for undergraduate students in Computer Science & Engineering program
- **Content:** This course teaches practical perspectives on research design, data collection, and analysis useful for managers.
- **Responsibilities:** Designed and wrote the syllabus, presented the lectures and led both teaching and recitation sessions, designed and prepared course projects, homework and exam problems.

Sabanci Business School, Sabanci University *Istanbul, Turkey*
Course Title: Operations Management *Summer 2018*
Role: Course Instructor
Syllabus: [Available here](#)

Management Undergraduate Program

- **Audience:** Junior and Senior students
- **Course Capacity:** 30 Students
- **Course Type:** Core Elective course
- **Content:** This course exposes the students to issues such as product and process design, capacity planning, inventory planning, and quality management at varying levels of decision making from strategic to operational.
- **Responsibilities:** Designed and wrote the syllabus, presented the lectures and led both teaching and recitation sessions, designed and prepared course projects, homework and exam problems.

CO-TEACHING &
TA EXPERIENCE

Sabanci Business School, Sabanci University *Istanbul, Turkey*
Introduction to Business Analytics *Spring 2017, Summer 2017, Spring 2019*
Operations Management *Summer 2015, Fall 2015, Fall 2017*
Introduction to Probability *Spring 2016*
Customer Relationship Management Using Location Intelligence *Spring 2015*
Supply Chain Management *Fall 2014*

Management Undergraduate Program and Business Analytics Minor program

- Was actively involved in helping the instructors with the teaching process of the courses, including co-teaching, presenting lectures and leading class discussions
- Led the recitation sessions and gave review lectures
- Helped with homework and exams preparation and grading tasks

MENTORING &
ADVISING
EXPERIENCE

Massachusetts Institute of Technology *Cambridge, MA*
Postdoc Mentoring Program for Ph.D. Students *Fall 2020*

- Mentored **three** IDSS Ph.D. students.
- led the meetings and informally discussed the students' research and grad school experience.
- Offered advice on how to succeed as a grad student and a researcher
- Arranged meetings with IDSS alumni working in industry to share their experience and answer the questions regarding working in the industry

Massachusetts Institute of Technology
Advising and Mentoring Undergraduate Students

Cambridge, MA
Fall 2017 - Present

MIT Undergraduate Research Opportunities Program (UROP)

- This program supports research partnerships between undergraduate students and faculty. - Mentored **twenty six** undergraduate students since Fall 2017.
- Co-authored **two** book chapters with **five** of the students
- **Fifteen** students were involved in development the 'Atlas of Opportunity' website and related research projects

SEMINARS &
INVITED TALKS

Leveraging Big Mobility Data to Understand Food Access and Eating Behavior Beyond the Neighborhood, *SAHMRI Scientific Seminar, Adelaide, South Australia* (May 2021).

A network analysis perspective to understanding the impacts of COVID-19 on mobility patterns, *Placekey Seminar Series* (April 2021).

Making hard decisions: Which stores to close?, *Placekey Seminar Series* (November 2020).

Understanding Social and Economic Impact of the Outbreak using Mobility Data, COVID-19: An Interdisciplinary Approach to the Understanding of a Pandemic course offered at *New College of Florida* (September 2020).

Data-driven insights for Tourism Industry, 'Tourism Meets Tech' Seminar by *FOMENT, Adelaide, South Australia* (June 2020).

Merchant Life in the Network: Predicting Financial Well-being Using Network Features, *Sabanci University Science Seminars: 'Science Never Stops'* (May 2020).

Economic outcomes predicted by diversity in cities, *MIT Connection Science Trusted Data* (March 2020).

Good Cities Are Goods, *CITIES4PEOPLE: INTELLIGENT DATA ANALYTICS FOR NEXT-GEN CITIES*, *JADS campus in 's-Hertogenbosch, The Netherlands* (November 2018).

Using Predictive Analytics to Learn and Predict Customer Invoice Payment Behavior, *Seminar Series #2, BAV Lab, Sabanci University, Istanbul, Turkey* (October 2016).

CONFERENCES

Mulay, N., Bishnoi, V., Katyal, Y., Bahrami, M., Moro, E., Saraswat, A., & Pentland, A., Effects of Stimulus Payments on Consumer Spending During COVID-19 Pandemic, *International Conference on Data Mining (ICDM). Workshop on Social Data Mining (SDM), IEEE, Auckland, New Zealand*, (December 2021)

Bahrami, M., Xu, Y., Tweed, M., Bozkaya, B., & Pentland, A., Making Hard Decisions: Which Stores to Close?, *European Conference on Operational Research (EURO 2021), Athens, Greece*,

(July 2021).

Bozkaya, B., Netto, C.F.S., Bahrami, M., Brei, V., Balcisoy, S., & Pentland, A., Gravitational Forecasting Reconciliation: Sales prediction without historical data, *LOD 2020 – The Sixth International Conference on Machine Learning, Optimization and Data Science* (July 2020).

Bahrami, M., Horn, A., De La Haye, K., Pentland, A., & Moro, E., Leveraging Big Mobility Data to Understand Food Access and Eating Behavior Beyond the Neighborhood, *IC2S2, Cambridge, MA, USA* (July 2020).

Bahrami, M., Suhara, Y., Boz, H. A., Balcisoy, S., Bozkaya, B., & Pentland, A., Merchant Financial Well-being Prediction Using Network Features, *IC2S2, Cambridge, MA, USA* (July 2020).

Netto, C.F.S., Bahrami, M., Brei, V., Balcisoy, S., Bozkaya, B., & Pentland, A., GRAVITATIONAL FORECAST RECONCILIATION, *42nd Annual ISMS Marketing Science Conference, Durham, NC, USA* (June 2020).

Bahrami, M., Chong, S. K., Chen, H., Balcisoy, S., Bozkaya, B., & Pentland, A., *International Conference of Social Computing, Beijing, China* (August 2019).

Boz, H. A., Bahrami, M., Suhara, Y., Bozkaya, B., & Balcisoy, S., An Exploratory Visual Analytics Tool for Multivariate Dynamic Networks. *11th Workshop on Visual Analytics (EuroVA), a co-lacted event in EuroVis* (May 2020).

Bahrami, M., Findik, Y., Bozkaya, B. & Balcisoy, S., Twitter Analytics Predict Public Protests, *ECSCW 2019 Materializing Activism Workshop, Salzburg, Austria*, (June 2019).

Bozkaya, B., Chong, S.K., Bahrami, M., Chen, H., Balcisoy, S. & Pentland, A., Exploring Drivers for Economic Growth Using Mobility and Transactional Data, *Challenges of Europe 2019, Bol, Croatia* (May 2019).

Bozkaya, B., Bahrami, M., Suhara, Y., Chong, S.K., Chen, H., Balcisoy, S. & Pentland, A., Human Mobility Networks: Using Gravity Models to Explain Food Foraging Behavior and More, *NetSci 2019, Burlington, VT, USA* (May 2019).

Suhara, Y., Bahrami, M., Bozkaya, B., & Pentland, A., A Gravity Model Of Market Share Based On Transaction Records, *Ninth International Conference on Complex Systems, ICCS 2018, Cambridge, MA, USA* (July 2018).

Bahrami, M., Findik, Y., Bozkaya, B. & Balcisoy, S., Twitter Reveals: Using Twitter Analytics to Predict Public Protests, *NERCCS 2018: First Northeast Regional Conference on Complex Systems. Binghamton, NY, USA* (April 2018).

Suhara, Y., Bahrami, M., Bozkaya, B. & Pentland, A., A Gravity Model of Market Share Based on Transaction Records, *INFORMS Business Analytics Conference, Baltimore, MD* (April 2018).

Bahrami, M., Bozkaya, B. & Balcisoy, S., Using Predictive Analytics to Learn and Predict Customer Invoice Payment Behavior, *IC2S2 2017, Cologne, Germany* (July 2017).

EDUCATION

Sabani Business School, Sabanci University

Ph.D. in Operations and Information Management

Dissertation Title: Behavioral Analytics: Understanding Individual and Group Behavior Using Transactional Big Data

Istanbul, Turkey

2018

Advisors: Prof. Burcin Bozkaya, Prof. Selim Balcisoy, and Prof. Alex ‘Sandy’ Pentland

Amir Kabir University of Technology (Tehran Polytechnic)

Tehran, Iran

Master of Business Administration

2012

Project Title: A Risk Breakdown Structure for New Telecom Operator “RighTel”

Advisor: Prof. Hooman Attar

Sharif University of Technology

Tehran, Iran

B.S. in Electrical Engineering

2007

Thesis Title: Computational Methods for Calculating Electromagnetic Fields of Geometric Shaped Wires

Advisor: Prof. Bijan Vosooghi Vahdat

REVIEWER
SERVICES

Scientific Reports, Big Data Journal, International Journal of Forecasting, Complexity, Array, PLOS ONE, International Journal of Information Management, Journal of Transport & Health, Frontiers in Big Data.

COMMUNITY
SERVICES

Program Committee Member for the Second IEEE International Workshop on Social Data Mining in the Post-pandemic Era (SocDM 2022) and International Conference on Data Mining (ICDM2022), Orlando, FL, USA (November 2022).

Program Committee Member for International Workshop on Modelling Uncertainty in the Financial World (MUFin21), 30th ACM International Conference on Information and Knowledge Management (CIKM2021), Gold Coast, Australia (November 2021).

Program Committee Member for Workshop on Business Analytics, Sabanci University, Istanbul, Turkey (April 2019).

Poster Session Moderator for International Conference on Computational Social Science (IC2S2 2020), Cambridge, MA, USA (July 2020).

INDUSTRY &
ENTREPRENEURIAL
EXPERIENCE

Peak

Startup for the tourism, events & Festival space

Adelaide, South Australia

Advisory Team Member

June 2020 - Present

- Peak is a new digital product for the tourism, events & festival space. It is a big data dashboard that can be used by tourism agencies, festivals, and event organizers to gain insights about visitors.

- Actively involved in conceptualizing and idea generation for this startup.

- Attend regular meetings with the team and founders to discuss the next steps and further development of the app.

- Helped secure a grant of \$150k as advisor from the government of South Australia (Go2Gov) for proof of concept development.

Safegraph

A location intelligence company

Denver, CO

Advisory Board Member

May 2021 - May 2022

- Provide feedback on the existing initiatives & help the team with ideas that can improve their services and better support the research community.

Pak Afzar Aria PJS co.

An electricity management products assembly and sales company

Tehran, Iran

CEO, Co-founder, and Member of Directorate Board

October 2010 – May 2014

- Recommended financial, marketing, and competition strategies.
- Managed the task related to finding suppliers, importing goods, assembly, and sales of the products including: transformers, UPS, voltage stabilizers, and small sized CNC machines.
- Participated in more than ten International Exhibitions.
- Achieved the award of “Superior Managers of Electricity and Electronics Industry” conference in Tehran, Iran, at 2011.

Control Afzar Tabriz Co Ltd.

Manufacturing, assembly, and sales of CNC machines

Tehran, Iran

Full Time R&D staff and Engineer

September 2007 – March 2009

Poortan Ltd.

A call center based sales company

Tehran, Iran

CRM Software Implementation Project Manager

March 2007 – July 2007

- Contributed to design and implementation of a CRM system for a call center and telephone marketing company
- Performed statistical analysis and helped with model building for the system

PROFESSIONAL
AFFILIATIONS

Institute of Electrical and Electronics Engineers (IEEE)

October 2022 - Present

National Postdoctoral Association (NPA)

July 2021 - Present

Marketing Science Institute (MSI)

July 2021 - Present

UNICEF big data initiative, Magic Box

April 2020 - Present

Beta Gamma Sigma (BGS)

November 2019 - Present

INFORMS

March 2018 - Present

Institute for Operations Research and the Management Sciences
