## Emanuele Borgonovo

ECONOMICS, POLITICS AND DECISION SCIENCES

FULL PROFESSOR Decision Analysis

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## Biography

Emanuele Borgonovo is Full Professor and Director of the Department of Decision Sciences of Bocconi University. He is a Research Affiliate of the Massachusetts Institute of Technology, Department of Nuclear Science and Engineering. He is coeditor-in-chief of the European Journal of Operational Research, member of the editorial board of several international journals, advisor of the Springer International Series in Management Science and Operations Research. He has been President of the Decision Analysis Society of INFORMS 2020-2022. He is a member of the Scientific Committee of the Fondazione Silvio Tronchetti Provera, Co-Chair of the European Safety and Reliability Association, Technical Committee on Uncertainty Analysis, and a fellow of the Bocconi Institute for Data Science and Analytics.

He holds a Ph.D. in Probabilistic Risk Assessment from MIT. He is the recipient of several national and international awards, has published over 100 scientific articles in top international journals. He has worked in international research projects with institutions such as the US Defense Advanced Research Project Agency (DARPA), the Idaho National Laboratory, the US Department of Energy, the US Nuclear Regulatory Commission, Electricité de France, Charles River Analytics, etc. His research interests concern Sensitivity Analysis, Decision Analysis, Risk Analysis, and Uncertainty Quantification. In his works, he has introduced several new sensitivity analysis techniques, like the differential importance measure, which has been introduced in the NASA Probabilistic Risk Assessment Procedures Guide for NASA Managers and Practitioners. He is the author of the books: "Sensitivity Analysis: An Introduction for the Management Science for Executives course, has been director of the Management Science Lab from 2013 to 2017, and teaches at the SDA MBA and DBA programs.

## Latest publications

BORGONOVO E., BAUCELLS M., DE ROSA A., PLISCHKE E., BARR J., RABITZ H. Direction of impact for explainable risk assessment modeling Risk Analysis, 2025

CHIANI L., BORGONOVO E., PLISCHKE E., TAVONI M. Global sensitivity analysis of integrated assessment models with multivariate outputs Risk Analysis, 2025

BORGONOVO E., FIGALLI A., PLISCHKE E., SAVARÉ G.

Global Sensitivity Analysis via Optimal Transport Management Science, 2024

CHIARINI A., GRANDO A., VENTURINI S., BORGONOVO E. Do automation and AI impact on job reduction? A study on perceived risk of losing job among white-collars in the Italian manufacturing companies Production Planning & Control, 2024, vol.35, no. 16, pp.2198-2211

BORGONOVO E., PLISCHKE E., RABITTI G. The many Shapley values for explainable artificial intelligence: A sensitivity analysis perspective European Journal of Operational Research, 2024, vol.318, no. 3, pp.911-926

BORGONOVO E., FEIN D., POLI E., VENTURINI S. Principles of Business Analytics Bocconi University Press - BUP, Milano, Italy, 2024

## Grants & Honors

Excellence in Research Award - Università Commerciale Luigi Bocconi , 2020

Excellence in Teaching Award - Università Commerciale Luigi Bocconi , 2020

IBM Faculty Award , 2015

Teaching Excellence Award - Università Commerciale Luigi Bocconi , 2015

Best Risk Analysis Paper Award, from 'Risk Analysis, an International Journal' for the paper: "Uncertainty in Climate Change: Can Global Sensitivity Analysis be of Help?", with B. Anderson, M. Galeotti and R. Roson - SRA - Society for Risk Analysis , 2014

Best Reviewer Award 'European Journal of Operational Research', 2013

Best Reviewer Award 'Reliability Engineering and System Safety' , 2013

Best Reviewer Award 'Risk Analysis' , 2013

Best Research Paper Award from the journal 'Economia & Management' - SDA Bocconi School of Management , 2012

Best Reviewer Award 'Environmental Modelling and Software', 2012

Research Excellence Award - Università Commerciale Luigi Bocconi , 2012

Best Reviewer Award 'European Journal of Operational Research', 2011

Research Excellence Award - Università Commerciale Luigi Bocconi , 2011

Research Excellence Award - Università Commerciale Luigi Bocconi , 2010

Research Excellence Award - Università Commerciale Luigi Bocconi , 2009

Research Excellence Award - Università Commerciale Luigi Bocconi , 2008

Research Excellence Award - Università Commerciale Luigi Bocconi , 2007

Research Excellence Award - Università Commerciale Luigi Bocconi , 2006