Xuefei LU
Professeur assistant

Académie : Digitalisation

Centre de recherche : SKEMA Centre for Analytics and Management Science

Campus : PARIS

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Intérêts de recherche

Statistical Machine Learning Uncertainty Quantification Big Data Problems Bayesian Non-Parametrics, Uncertainty Quantification, Operations Research, Artificial Intelligence

Domaines d'enseignement

Artificial Intelligence, Business Analytics, Data Science, Machine Learning, Python

Formation

2019	Ph.D. in Statistics, Bocconi University, Italie
2013	MSc in Analytics: Operational Research and Risk Analysis, The University of Manchester, Royaume Uni

Expérience Professionnelle

Positions académiques principales

Depuis 2021	Assistant Professor, SKEMA Business School, France
2020 - 2021	Assistant Professor, Management Science and Business Economics Group, University of Edinburgh Business School, Royaume Uni
2018 - 2020	Chercheur postdoctoral, Politecnico di Milano, Italie

Contrats de recherche, prix et distinctions

Prix et distinctions

2024	Clemen-Kleinmuntz Decision Analysis Best Paper Award, The Institute for Operations Research and the Management Sciences (INFORMS), Etats-Unis d'Amérique

Publications

Articles académiques revus

FLOREALE, G., BARALDI, P., LU, X., ROSSETTI, P. et ZIO, E. (2024). Sensitivity Analysis by Differential Importance Measure for Unsupervised Fault Diagnostics. *Reliability Engineering and System Safety*, 243, pp. 109846.

LU, X. et BORGONOVO, E. (2023). Global Sensitivity Analysis in Epidemiological Modeling. *European Journal of Operational Research*, 304(1), pp. 9-24.

LU, X., BORGONOVO, E. et RABITTI, G. (2023). Sensitivity Analysis of Pandemic Models Can Support Effective Policy Decisions. *Journal of Computational and Graphical Statistics*, 32(3), pp. 767-768.

HAZEN, G., BORGONOVO, E. et LU, X. (2023). Information Density in Decision Analysis. *Decision Analysis*, 20(2), pp. 85-185-C2.

LU, X. et CALABRESE, R. (2023). The Cohort Shapley value to measure fairness in financing small and medium enterprises in the UK. *Finance Research Letters*, 58(Part C), pp. 104542.

LU, X., XU, M., BARALDI, P. et ZIO, E. (2022). Generative Adversarial Networks With AdaBoost Ensemble Learning for Anomaly Detection in High-Speed Train Automatic Doors. *IEEE Transactions on Intelligent Transportation Systems*, 23(12), pp. 23408-23421.

CERVI, E., LU, X., CAMMI, A., DI MAIO, F. et ZIO, E. (2022). Sensitivity-Analysis-Driven Surrogate Model for Molten Salt Reactors Control. *Journal of Nuclear Engineering*, 3(4), pp. 277 - 294.

LU, X., BARALDI, P. et ZIO, E. (2020). A Data-Driven Framework for Identifying Important Components in Complex Systems. *Reliability Engineering and System Safety*, 204(107197), pp. 107197.

LU, X., RUDI, A., BORGONOVO, E. et ROSASCO, L. (2020). Faster Kriging: Facing High-Dimensional Simulators. *Operations Research*, 68(1), pp. 233-249.

ANTONIANO-VILLABOS, I., BORGONOVO, E. et LU, X. (2020). Nonparametric estimation of probabilistic sensitivity measures. *Statistics and Computing*, 30, pp. 447-467.

BORGONOVO, E., LU, X., PLISCHKE, E. et RAKOVEC, O. (2017). Making the Most Out of a Hydrological Model Data Set: Sensitivity Analyses to Open the Model Black-Box. *Water Resources Research*, 53(9), pp. 7933-7950.

Actes d'une conférence

LU, X., ANTONELLO, F., BARALDI, P. et ZIO, E. (2019). Data-Driven Identification of Critical Components in Complex Technical Infrastructures Using Bayesian Additive Regression Trees., Proceedings of the 29th European Safety and Reliability Conference, pp. 1-5.

Présentations dans des conférences

LU, X. et BORGONOVO, E. (2024). Unveiling the Path to Desired Predictions: An Interpretability Approach for Black-Box Models. Dans: 2024 SIAM Conference on Uncertainty Quantification. Trieste.

LU, X. et BORGONOVO, E. (2023). What Can a Person Change to Obtain a Desired Prediction? An Interpretability Approach. Dans: 2023 INFORMS Annual Meeting. Phoenix.

LU, X., BORGONOVO, E. et HAZEN, G. (2021). Information Density in Simulation Experiments. Dans: INFORMS Annual Meeting. Anaheim.

LU, X. (2019). Data-Driven Identification of Critical Components in Complex Technical Infrastructures Using Bayesian Additive Regression Trees. Dans: The annual European Safety and Reliability Conference (ESREL). Hannover.

Présentations dans des séminaires de recherche

LU, X. (2024). Unveiling the Path to Desired Predictions: An Explainable Approach for Black-Box Models. Dans: Statistics Seminars at Department of Decision Sciences, Bocconi University. Milan.

Autres activités de recherche

Supervision de thèses / HDR

Depuis 2023	K. SAHATOVA, SKEMA Business School, Doctorat, Co-directeur de thèse
Depuis 2021	Z. OUYANG, University of Edinburgh Business School, Doctorat, Co-directeur de thèse
2023	M. BUDZINSKI, Bocconi University, Doctorat, Rapporteur