Alexander Stevens

69, Naamsestraat 3000 Leuven 0032 (471) 550 773 alexander.stevens@kuleuven.be



Experience

Aug. 2023-Today Visiting Researcher, School of Information Systems, QUT, Australia.

- Project in collaboration with the eXplainable Analytics for Machine Intelligence (XAMI)
- Counterfactual Explanations for Process Outcome Prediction
- Under the supervision of Prof. Dr. Chun Ouyang

Oct. 2020-Today PhD in Business Economics, LIRIS, KU Leuven, Belgium.

- o Research is focused on Trustworthy AI for Process Outcome Prediction
- Under the supervision of Prof. Dr. Johannes De Smedt

Jun. 2020-Aug. Research Assistant, LIRIS, KU Leuven, Belgium.

2020 • Creation of a Data Science Tutorial in Python

• Under the supervision of Prof. Dr. Bart Baesens

Sep. 2019–Jun. Master Thesis Project, Brainjar, Belgium.

2020 • Explainability and Fairness in Machine learning: Improve Fair End-to-end lending for Kiva

• Technical support by Pieter Joosen and Kurt Janssens

o Under the supervision of Ziboud Van Veldhoven and Prof. Dr. Jan Vanthienen

Jan. 2020–Mar. Data Analyst, Datalab Team, TVH, Belgium.

2020 • Creation of a Data Science Tutorial in Python

Education

2020-Today Ph.D. Student in Business Economics, KU Leuven, Belgium (78.33%).

Mar. 2022–Jun. Explainable and Trustworthy AI, Ghent University, Belgium (16/20).

2022 • Additional post-academic course.

• In-depth overview of the state-of-the-art research and techniques to achieve explainable and trustworthy artificial intelligence.

2018–2020 M.Sc. Business Engineering, KU Leuven, Belgium (74.46%).

Majored in Data Science and Business Analytics

Sep. 2019–Dec. M.Sc. Entrepreneurship and Innovation, SKEMA Business School, France (82.67%).

2019 • Exchange Program to the Sophia Antipolis campus

Sep. 2016–Dec. Innovation and Social Entrepreneurship, IÉSEG, France (14/20).

2016 • Academic course (in French).

Competences

Coding Languages Python, R, LATEX, MATLAB

NVIDIA Fundamentals of Accelerated Data Science

DataCamp Bayesian Data Analysis, Network Analysis, Image Processing, Deep Learning, Cleaning

Certificates Data, Linear Modelling

Languages **Dutch** •••••

English ••••
French •••

Websites

GitPage, GitHub, Google Scholar, LinkedIn

Supervisor

Master Theses Successfully supervised a total of 12 master thesis groups (2-3 persons) for Master of Information Management (6), Master of Business and Information Systems Engineering (4) and Master of Business Engineering (2).

> Topics of interest: Fairness, Bias Mitigation, Explainability, Robotic Process Automation, Topic Modelling

> Supervised the Best Thesis Award in Master of Business and Information Systems Engineering (1) and Master of Information Management (1).

Reviewer

- 2023 International Conference on Business Process Management (BPM), Conference on Advanced Information Systems Engineering (CAiSE), ACM Transactions on Knowledge Discovery from Data (TKDD), IEEE Transactions on Services Computing (TSC), International Conference on Cooperative Information Systems (CoopIS), Decision Support Systems (DSS)
- 2022 International Conference on Process Mining (ICPM)
- 2021 International Conference on Process Mining (ICPM) Topics of interest: Privacy, Anomaly Detection, Deep Learning, Explainability in

Peer-Reviewed Publications

Predictive Process Monitoring

- 2023 Manifold Learning to Improve Robustness and Generalization in Process Outcome Prediction, Alexander Stevens, Jari Peeperkorn, Johannes De Smedt, Jochen De Weerdt, International Conference on Process Mining (ICPM), Accepted for Publication.
- 2023 Evaluating Text Classification: A Benchmark Study, Manon Reusens, Alexander Stevens, Jonathan Tonglet, Johannes De Smedt, Wouter Verbeke, Seppe vanden Broucke, Bart Baesens, Expert Systems With Applications), In Submission.
- 2023 Explainability in Process Outcome Prediction: Guidelines to Obtain Interpretable and Faithful Models, Alexander Stevens, Johannes De Smedt, European Journal of Operational Research (EJOR), Accepted for Publication.
- 2023 Outcome-Oriented Predictive Process Monitoring on Positive and Unlabelled Event Logs, Jari Peeperkorn, Carlos Ortega Vázquez, Alexander Stevens, Johannes De Smedt, Seppe vanden Broucke, Jochen De Weerdt, ML4PM, Accepted.
- 2022 Assessing the Robustness in Predictive Process Monitoring through Adversarial Attacks, Alexander Stevens, Johannes De Smedt, Jari Peeperkorn, Jochen De Weerdt, International Conference on Process Mining (ICPM).
- 2022 Quantifying Explainability in Outcome-Oriented Predictive Process Monitoring, Alexander Stevens, Johannes De Smedt, Jari Peeperkorn, Jochen De Weerdt, ML4PM.
- 2020 Explainability and Fairness in Machine Learning: Improve Fair End-to-end Lending for Kiva, Alexander Stevens, Peter Deruyck, Ziboud Van Veldhoven, Jan Vanthienen, Australasian Data Mining Conference (AUSDM).

Extended Abstracts

- 2023 Manifold Learning in Predictive Process Monitoring, Alexander Stevens, Jari Peeperkorn, Johannes De Smedt, Jochen De Weerdt, Belgian Operational Research Society (ORBEL), Published.
- 2023 Evaluating Text Classification: A Benchmark Study, Manon Reusens, Alexander Stevens, Jonathan Tonglet, Johannes De Smedt, Wouter Verbeke, Seppe vanden Broucke, Bart Baesens, Belgian Operational Research Society (ORBEL), Published.

Evaluating Text Classification: A Benchmark Study, Manon Reusens, Alexander Stevens, Jonathan Tonglet, Johannes De Smedt, Wouter Verbeke, Seppe vanden Broucke, Bart Baesens, Conference of the International Federation of Operational Research Societies), Published.