PhD Scholarship
in cooperation with REMONDIS

Rock Your PhD with a PhD Scholarship at Graduate School of Logistics

Doing a doctorate in three years, on issues from industrial practice and in a comprehensive scientific network? It's possible - with a scholarship from REMONDIS SmartRec GmbH at the Graduate School of Logistics (GSofLog) in Dortmund.

You can expect an innovative, interdisciplinary team, comprehensive academic supervision from top-class professors from the fields of data science and logistics, as well as an exciting practical question - all wrapped up in the structured doctoral programme of Graduate School of Logistics, which is funded purely by industry.
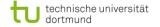
Your Research Project

Modeling and analysis of recycling processes using artificial intelligence learning methods

Recycling is one of the most important contributions to sustainable climate and resource protection. However, modern AI processes in recycling are still in its infancy and not established. Your work can change that! Using the example of recycling plants in metal and plastics processing, you analyze the recycling process with modern statistical methods and machine learning techniques. You develop a quantitative model for analyzing the quality of the recycling process.
The model shall be interpretable, include expert knowledge, and be optimized and applied for online process control of the recycling process, taking into account the process conditions and market data.

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tu technische universität dortmund

GRADUATE SCHOOL OF LOGISTICS

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How to model dependencies in cascaded recycling processes? How to link these to environmental and market data? Can transfer learning be used to apply your models to other recycling processes?
You will test model prototypes at Remondis in Bergkamen and/or Erftstadt.

The doctoral supervisor and first examiner is Prof. Dr. Markus Pauly, TU Dortmund University, Faculty of Statistics.

Your topic?

You want to make the topic your research project? That's what you should bring with you:

- A very good Master's degree in Data Science, Statistics or related disciplines (e.g. Mathematics, Computer Science, Physics, (Industrial) Engineering).
- Good programming skills in Python or R
- Communication skills, reliability and willingness to travel
- Complete application documents including cover letter, CV, references, a letter of recommendation from a university professor
- Very good knowledge of German and English
- Organisational skills and an independent and efficient way of working
- A spirit of research and the ability to work in a team

The scholarship rate is initially 1,400 euros per month (tax-free). You will receive a workplace at the Logistics Campus of TU Dortmund University and will be embedded in the structured doctoral model of GSofLog. Your supervisor, your Day-to-Day Supervisor, the coordinator, the scholarship holders and the Chair of Mathematical Statistics and Applications in Industry will support you in the process of the three-year doctorate.

If you find yourself, send your application documents in a PDF document by e-mail to:
bewerbung@gsoflog.de.

The application deadline is **May 14, 2023**.

Any further questions?

If you have any questions about the scholarship or the application process, you can find more information on our website www.gsoflog.de.

Contact:

TU Dortmund University | Graduate School of Logistics | Britta Scherer | Leonhard-Euler-Straße 5 | 44227 Dortmund | e-mail: scherer@gsoflog.de | Phone: +49 (0) 231 9743 413