Explainable machine learning

Course details

Ribana Roscher

These slides have been created by Ribana Roscher.



Course details

- Lecturer: Ribana Roscher
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- Tutor: Ahmed Emam (<u>aemam@uni-bonn.de</u>) and Mohamed Ibrahim

Always ask if you have questions



Lecture topics

- 1. Introduction to explainable machine learning
- 2. Looking into a neural network visualizing what was learned
- 3. Global model agnostic approaches
- 4. Local model agnostic approaches
- 5. Interpretation by backward propagation and concept discovery

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Course structure

- **11.10.** Lecture
- 18.10. No lecture (week blocked)
- **25.10.** Lecture
- **01.11.** Public holiday (different day?)
- 08.11. No lecture (different day?)
- 15.11. No lecture (week blocked)
- **22.11.** Lecture
- **29.11.** Lecture
- **06.12** Dies Academicus
- 12.12. Seminar topic discussions
- **10.01.** Student presentions
- **31.01.** Final presentation



Course structure

- 2 exercises (after the 2. and 4. lecture)
 - Connected to the lectures
 - Groups no larger than 2 students
 - No extra exercise time slot, but office/zoom hours
 - Time for each exercise: two weeks
 - Ask if you need an extension, copied exercises are 0 points for both groups
- Seminar
 - Short presentation and report/poster/podcast/video about a topic of interest related to the lecture
 - Groups of 1-2 students