

Lecture: Data Science II Semester: WiSe 23/24 Group Name: Deadlock Group Members:

Xiaoyan Xue (xiaoyan.xue@stud.tu-darmstadt.de)

I am a master student from information and communication engineering(ice) major. I've made research about network evolving process via machine learning technologies as my bachelor thesis, and passed several lectures about data science and reinforcement learning last semester. I also have experience in designing and implementing websites via java and react stacks but not sure whether will be useful in this programme. I am really looking forward to make something with practical business or technological value under your guide.

#### **Skill Sets:**

programming	Java, python
database	MySQL
Reinforcement learning	Basic knowledge
Data science	Basic knowledge
Ui implementation	React, html, css, JavaScript

# Jian Jian(jiangjian\_0320@163.com)

I am Jiang Jian, a master student in ICE. I completed the Data Science course last year, gaining insights into machine learning. I've also independently studied neural networks and possess a foundational knowledge of Python programming. Looking forward to further expanding my skills and knowledge in the field.

#### **Skill Sets:**

Python programming

Data science basic knowledge

# Haoyue Zhu(bit1120172905@163.com)

My name is Haoyue Zhu. I have taken the data science 1 course. Therefore, I have some basic knowledge about python language and data analysis. I have a strong sense of teamwork, and I am willing to work in a team.

#### **Skill Sets:**

Python programming

Data science basic knowledge

#### Ruize Xia(ruize.xia@stud.tu-darmstadt.de)

Hallo my name is Ruize Xia. I belong to ICE Program. I've taken DS lecture before. When I was an undergraduate, I also studied some python, and once crawled some housing prices in Tianjin, China and make a forecast of the relevant house prices in the coming months. Besides I also

learned to make some simple apps with Android studio and run them on my phone. I'm more interested in machine learning, thank you so much.

### **Skill Sets:**

Python programming

Data science basic knowledge

Android app implementation

# Keren Zhou(zhouqkewrene@gmail.com)

I am Zhou Keren. Master's degree in Information and Communication Engineering from ETIT. I have studied data science, dsp, machine learning ICT in related courses. Have a certain understanding of python and machine learning theoretical models. I have done topic related to KNN model before.

#### **Skill Sets:**

Python programming
Machine learning technologies
Signal processing algorithms

### Xiaoqing Wang(xiaoqing.wang@stud.tu-darmstadt.de)

I am Xiaoqing Wang, currently pursuing a master's degree in Electronic and Information Technology with a specialization in Communication Technology. My passion and curiosity lie in the field of data analytics research and the application of machine learning algorithms. To fulfill this interest, I enrolled in the "Machine Learning in Information Communication Technology" course last semester. During this course, I acquired a foundational understanding of Python programming and gained practical exposure to fundamental machine learning algorithms. This semester, I am continuing my exploration in this area by enrolling in the "Machine Learning & Energy" course. My journey has inspired me to take my data science skills to the next level and engage in profound discussions on cutting-edge topics within the field. I would like to consolidate and refine my theoretical knowledge of data science and gain project experience to improve my practical problem solving skills through completing projects. Thank you for your time, and I am greatly looking forward to learning from you, my team members, and contributing positively to our seminar discussions. If you have any questions or need to reach me, you can contact me via email at xiaoqing.wang@stud.tu-darmstadt.de or by phone at 01628911560.

#### **Skill Sets:**

Python programming
Machine learning algorithms
Cutting-edge topic experience

# Topic plan: Object detection in images

Autonomous driving has become a popular heated issue recent years which has a great business prospect. We want to design an image recognition system to help autonomous driving. We hope to fix on some detailed field in object detection in auto-driving and solve some practical problems rather than simple detections which the industry had already solved, here's some topics we are interested in:

- 1. Dynamic target detection. Identify nearby vehicles and pedestrians.
- 2. Lane line detection to help assist driving.
- 3. Traffic sign recognition. Drivers can be reminded to pay attention to corresponding signs.

However, we don't have much experience in auto-driving industries and are not sure whether our choices too difficult to implement, which really hopes to discuss with you about more details.

# **Arrangement:**

We hope to get an arrangement with you for our first online meeting to discuss the topics. Please contact us via email if you are free. Thank you all the same.



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