



# GREENPEAK PARTNERS

## AI DEPLOYMENT AND OPERATIONS

CHAIR OF ARTIFICIAL INTELLIGENCE | PROF. DR. HEINER STUCKENSCHMIDT  
GREENPEAK PARTNERS | LINDA HONG

PROJECT SEMINAR

# SOME WORDS ABOUT MYSELF

## Curriculum Vitae

### Career

10/2026 – today  
**Greenpeak Partners, Munich**  
*AI Transformation Lead*

01/2024 – 08/2026  
**E.ON Digital Technology GmbH, Munich**  
*Senior Data Engineer*

03/2022 – 12/2023  
**Boston Consulting Group, Berlin**  
*Data Scientist*

09/2020 – 02/2022  
**Sony Music Entertainment GmbH, Berlin**  
*Data Scientist*

### Education

2017 – 2020  
**University of Mannheim**  
Mannheim Master in Data Science (M. Sc.)

2013 – 2016  
**Friedrich-Alexander-University Erlangen-Nürnberg**  
International Business Studies (B. A.)



# LEARNING GOALS

At the end of the seminar, you should be familiar with the following topics:

- Usage of an energy data set to predict the future electricity demand
- Basic understanding of the German electricity market and the current challenges and opportunities
- Basic understanding about what a Private Equity Company is doing and how we leverage AI in our operations
- Understand the usage of cloud technologies
- Usage of Azure to conduct a machine learning project
- Usage of Databricks to conduct cloud computation
- Usage of Terraform to configure infrastructure as code
- Usage of Github to track version control
- Conduct a group work to train working in teams

# THIS LECTURE WILL END THE 2<sup>ND</sup> OF DECEMBER

| Wochentag | Datum ▲    | Von - Bis     | Raum                                |
|-----------|------------|---------------|-------------------------------------|
| Mi        | 09.09.2026 | 17:15 - 18:45 | ZOOM-Lehre-104 (Virtuelles Gebäude) |
| Mi        | 23.09.2026 | 17:15 - 18:45 | ZOOM-Lehre-104 (Virtuelles Gebäude) |
| Mi        | 07.10.2026 | 17:15 - 18:45 | ZOOM-Lehre-104 (Virtuelles Gebäude) |
| Mi        | 21.10.2026 | 17:15 - 18:45 | ZOOM-Lehre-104 (Virtuelles Gebäude) |
| Mi        | 04.11.2026 | 17:15 - 18:45 | ZOOM-Lehre-104 (Virtuelles Gebäude) |
| Mi        | 18.11.2026 | 17:15 - 18:45 | ZOOM-Lehre-104 (Virtuelles Gebäude) |
| Mi        | 02.12.2026 | 17:15 - 18:45 | ZOOM-Lehre-104 (Virtuelles Gebäude) |

→ **We will proceed with the students passing the requirements**

→ **Final group presentation**

# IE 679 AI DEPLOYMENT AND OPERATIONS

| Guardrail         | Detail                                                             |
|-------------------|--------------------------------------------------------------------|
| Number of credits | 3 ECTS                                                             |
| Lecture time      | Wednesdays, 17:15 – 18:45                                          |
| Lecture interval  | Every second week, 7 lectures in total                             |
| Attendance        | Online                                                             |
| Grading format    | Group work with final presentation, see details on following slide |

# WE WILL USE THE SMARD DATASET ON GERMANY'S ELECTRICITY CONSUMPTION

About the data:

- We are using the German electricity consumption between 2019 and 2024
- Predict the daily and hourly energy consumption for Germany in 2024; You can access the time series **here**.
- You can find more information on the data [here](#)



These columns  
refer to the  
relevant time  
period

| Datum von  | Datum bis  | Netzlast [MWh] Berechnete Auflösungen |
|------------|------------|---------------------------------------|
| 01.01.2019 | 02.01.2019 | 1.097.118,75                          |
| 02.01.2019 | 03.01.2019 | 1.388.494,25                          |
| 03.01.2019 | 04.01.2019 | 1.466.308,25                          |
| 04.01.2019 | 05.01.2019 | 1.486.876,25                          |

Use this as the  
outcome  
variable to  
predict

# WE EXPECT YOU TO COVER THE FOLLOWING TOPICS IN THE GROUP WORK

We will create groups of 3 students; The minimum requirements for the group work are:

- Usage of an energy data set (SMARD) to predict the future electricity demand
- Conduct exploratory data analysis, machine learning and enhance the dataset with potential further datasets
- Visualize your findings with suitable artifacts such as dashboards, charts, etc.
- Create reusable code that can be executed in the Azure cloud
- Share your code in a Github repository; please highlight who committed the code
- Summarize your findings in a paper and put them into business perspective; Find suitable solutions to better predict the future electricity demand if abundant information would be available
- Conduct a group presentation of your findings (**we expect each student to present**)