

Advanced Artificial Intelligence in Biomedicine: Introduction

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WHO ARE WE?

- ▶ Research group “Genome Data Science”
<https://gds.techfak.uni-bielefeld.de>
- ▶ Coordinates:

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Organization

MODULES

- ▶ Seminar part of modules
 - ▶ *39-Inf-BDS Biomedical Data Science for Modern Healthcare Technology* (graded, “benotete Prüfungsleistung”, “Ausgewähltes Seminar”)
 - ▶ *39-Inf-WP-CLS-x* (graded, “Vertiefendes Seminar”)
 - ▶ *39-Inf-WP-DS-x* (graded, “Vertiefendes Seminar”)
 - ▶ *39-M-Inf-ABDA Advanced Big Data Analytics* (ungraded; expiring)
 - ▶ *39-M-Inf-ABDA_a Advanced Big Data Analytics* (graded)
 - ▶ *39-M-Inf-INT-app Applied Interaction Technology* (graded, Option 2  Exercises)
 - ▶ *39-M-Inf-INT-app-foc Applied Interaction Technology (focus)* (graded; Option 1: Seminar 1 or 2, no exercises; Option 3: Seminar  Exercises)
- ▶ Look up details:
<https://ekvv.uni-bielefeld.de/sinfo/publ/module>

PRESENTATION, REPORTS, PAPERS

- ▶ Presentations:
 - ▶ Individual presentations
 - ▶ To last for approx. 30 minutes, followed by discussion
 - ▶ Present contents of scientific paper
- ▶ Reports:
 - ▶ Reports summarize contents of paper
 - ▶ Reports 8-10 pages
- ▶ Papers:
 - ▶ Papers: some already available, list will be completed
 - ▶ Papers available via Wiki: <https://gds.techfak.uni-bielefeld.de/teaching/2025winter/aaibm>

EXERCISES

- ▶ Exercises only for Master Intelligent Systems students
- ▶ Exercises run by *Jorge Avila Cartes*
 - ▶ Voluntary participation possible
- ▶ Exercises:
 - ▶ Refer to individual presentations
 - ▶ Summaries of individual presentations
 - ▶ Apart from one own's presentation
 - ▶ Summaries approximately 500-600 words
 - ▶ During exercises:
 - ▶ Contents of individual presentations revisited
 - ▶ Summaries are discussed
 - ▶ *Start:* Along with presentations, schedule yet TBD
- ▶ Submissions:
 - ▶ Submissions one week after presentations
 - ▶ Discussions one week after submissions

SCHEDULE

- ▶ Organization and introduction: *today*
- ▶ How to present (brief): *today* (hybrid)
- ▶ How to write (brief): *today* (hybrid)

SCHEDULE II

- ▶ **Presentations:** *from November 20*
 - ▶ Up to two presentations per week
 - ▶ Block seminar days possible as well (yet TBD)
- ▶ **Technical Report:** *after presentation:*
 - ▶ Optimally, report profits from feedback provided after presentation
 - ▶ Drafts can be submitted for discussion
 - ▶ Improving drafts based on feedback
 - ▶ *Submission deadline: February 28, 2026*

Thanks for your attention!