

Stochastics

Bachelor Applied Artificial Intelligence (AAI)

Winter term 2022/23



Lecturer

Prof. Dr. André Herzwurm

Background

- ▶ mathematics, stochastics
- ▶ insurance industry

Contact information

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- ▶ office hour: by appointment

Course Details I

Prerequisites

Analysis I + II, Linear Algebra (recommended)

Dates

- ▶ lecture + exercise (4 hours per week)
 - ▶ Tuesday, 08:00-11:15, R1.01

Course material

- ▶ <https://learning-campus.th-rosenheim.de/>
- ▶ course name: Stochastics (AAI-B3), WiSe22
- ▶ password: Stoch_AAI-B3_WiSe22

Course Details II

Literature

- ▶ H.-O. Georgii, Stochastics, DeGruyter, 2008+ (MATH)
- ▶ A. Steland, Basiswissen Statistik, Springer, 2016 (INF)
- ▶ S.M. Ross, Introduction to Probability and Statistics for Engineers and Scientists, Academic Press, 2014

Topics

descriptive statistics (sample, measures of location, histogram etc), inferential statistics (point estimation, confidence intervals, statistical tests), probability theory (probability space, random variables, independence, expectation, specific distributions, limit theorems), linear model (regression analysis).

Examination

Stochastics

- ▶ written exam: 90 min.
- ▶ auxiliary tools: 1 sheet (DIN A4) both sides, handwritten calculator (non-programmable)

Linear Algebra

- ▶ written exam: 90 min.
- ▶ auxiliary tools: 1 sheet (DIN A4) both sides, handwritten ~~calculator (non-programmable)~~
- ▶ date: 09.01.2023 (Mon), 4 pm
- ▶ place: A3.13