Veranstaltung | Workshop

Introduction to copulas and dependence

with Prof. Dr. Natalie Packham (d-cube)

Di
19.11.

Uhrzeit

13.00–16.00

Veranstalter/in

Institute for Data-Driven Digital Transformation (d-cube) in Kooperation mit der Methodenwerkstatt Statistik

Zum Institut

Have you ever wondered how to describe the dependence of random variables beyond linear correlation? In many fields, such as finance and insurance, linear correlation fails to capture the more complex joint behaviour of random variables. Copulas provide a framework that decouples the behaviour of individual random variables from their joint dependence structure, offering great flexibility in modelling multivariate stochastic events or processes. In this session, participants will be introduced to the fundamental theory of copulas, their key properties, and various families such as Gaussian and Archimedean copulas. We will explore dependence measures, simulation and estimation techniques, and look at some practical examples.