

Artificial Intelligence for actuarial studies

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Course : 12 hours - TP : 6 hours

Objectives

To understand the main issues (methodological, commercial, regulatory) related to the use of data science in actuarial science.

Outline

I - The contexts of application of data-science in actuarial science

- 1) Underwriting and pricing
- 2) Provisioning and risk management
- 3) Associated risks

II - Statistical Learning Concepts

- 1) Aggregation
- 2) Bootstrap
- 3) Classical statistical learning methods

III - Example of insurance applications

Bibliography

- Hastie, T., Tibshirani, R., Friedman, J. (2001) The Elements of Statistical Learning, Springer.
- James G., Witten, D., Hastie T. Tibshirani, R. (2013) An Introduction to Statistical Learning with Applications in R.