FACOLTÀ DI SCIENZE MATEMATICHE, FISICHE E NATURALI DIPARTIMENTO DI MATEMATICA E FISICA "NICCOLÒ TARTAGLIA" INTERNATIONAL DOCTORAL PROGRAM IN SCIENCE

# Machine learning and BIG data 8 hours Course

### Dott. Giulio BENETTI

Medical Physics Unit, Azienda Ospedaliera Universitaria Integrata, Verona

#### **COURSE AIMS:**

Nowadays, the contribution of artificial intelligence to our daily routine is growing exponentially, in fields spanning from our Cortana's or Siri's speech and face recognition to self-driving cars, games or to automatic analysis of radiological images for diagnosis and prognosis. The course aims to describe the main methods adopted in the field of machine learning and to provide some hands-on analysis to fraternize with this technology. Some supervised and unsupervised techniques will be investigated for models' creation and validation under R environment. A basic but solid knowledge of the subject is desirable to future MDs and PhDs to foresee the beast underlying their everyday actions.

#### Requirements:

- basic knowledge of any programming code (if/for statements)
- a laptop with R and RStudio installed (both Windows and MacOS are fine)

Informazioni: <u>luca.gavioli@unicatt.it</u>

## PhD Course

16<sup>th</sup> September 2022, via Garzetta 48, Brescia 9:30-13:30 - Aula 22

23<sup>rd</sup> September 2022, via Garzetta 48, Brescia 9:30-13:30 - Aula 26

