



alessandro.angioi@hotmail.com



+49 176 78805974



Mannheim, Germany



20 October, 1990



www.angioi.com



linkedin.com/in/aleangioi



github.com/xalelax

## SKILLS

C/C++

Python

Git

Scikit-learn

Tensorflow

Keras

SQL

Pandas

## LANGUAGES

English



Italian



German



## INTERESTS

Machine Learning

Deep Learning

Programming

Statistics

AI

Data Science

# Dr. Alessandro Angioi

## Theoretical Physicist

A committed scientist with proven expertise in solving problems via analytical calculations, computer simulations, and data analysis. Able to communicate complex ideas effectively to professionals with different backgrounds. Fast learner, motivated by continuous improvement.

## WORK EXPERIENCE

### Scientist

Max Planck Institute for Nuclear Physics

10/2014 – 02/2019

Heidelberg, Germany

Highlights:

- Analyzed and visualized large data sets, leading to new insights on complex phenomena
- First author of three research articles in prestigious peer-reviewed journals. One article was marked as an "Editors' Suggestion" because of its particular interest, importance, and clarity
- Presented research results at seven conferences, 15+ in-house talks and journal clubs
- Tutored two courses at the University and mentored two high school interns

## EDUCATION

### Doctor of Philosophy - Physics

Ruprecht-Karls-Universität Heidelberg

10/2014 – 07/2018

Heidelberg, Germany

Graduated magna cum laude

- Studied the complex and stochastic behavior of particles interacting with strong laser fields with analytical and numerical approaches
- Designed and wrote the entire C++ code base needed for generating and analyzing results, with crucial parts which were parallelized via the MPI library and ran on a Linux cluster

### Master's Degree - Theoretical Physics

University of Trieste

12/2012 – 09/2014

Trieste, Italy

Grade: 110/110 magna cum Laude

- Thesis about unexplored properties of a widely-used tool in the study of stochastic processes: the path integral

### Bachelor's Degree - Physics

University of Trieste

09/2009 – 11/2012

Trieste, Italy

Grade: 106/110

- Thesis where Bayesian inference and other statistical methods were adopted in order to study large datasets coming from the Large Hadron Collider at CERN
- Seven courses involved working extensively with data and algorithms, and fitting theoretical models with experimental data. One course, 48 hours long, was entirely about Neural Networks

## CERTIFICATIONS

Deep Learning, a 5-course specialization by deeplearning.ai on Coursera (01/2019)

Machine Learning by Stanford University on Coursera (12/2018)

## SELECTED FIRST-AUTHORED PUBLICATIONS

1. Nonlinear Single Compton Scattering of an Electron Wave Packet

Paper awarded with an "Editors' Suggestion" label. Published in Phys. Rev. A 93 (2016), 052102.

2. Quantum Limitation to the Coherent Emission of Accelerated Charges

Published in Phys. Rev. Lett. 121 (2018), 010402.