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.

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📍 Heidelberg, Germany

📅 20 October, 1990

🌐 www.angioi.com

in linkedin.com/in/aleangioi

github.com/xalelax

SKILLS

C/C++   Python

Git   SQL

Data Visualization

Tensorflow   Keras

LANGUAGES

English
● ● ● ● ●

Italian
● ● ● ● ●

German
● ● ● ○ ○

INTERESTS

Machine Learning

Deep Learning

Programming

Statistics   AI

Data Science

WORK EXPERIENCE

Scientist
Max Planck Institute for Nuclear Physics ⇗

10/2014 – Present   *Heidelberg, Germany*

Highlights:

- Analyzed and visualized large data sets, leading to new insights on complex phenomena
- First author of two 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) ⇗

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.