



Andrea Amico

PhD in Physics

Problem-solving is what I enjoy the most. I have a scientific mindset and a great passion for programming. During my PhD studies I published on several top scientific journals and I worked with world-leading scientists including the Nobel Laureate Professor Wolfgang Ketterle. I'm currently interested in data science, machine learning and artificial intelligence.



amico.andrea.90@gmail.com



+39 3357449618



Florence, Italy



andreaamico.eu



linkedin.com/in/andrea-amico-90



github.com/andreaamico

SKILLS

Python

Data analysis and visualization

C++

C#

JS

Mathematica

MATLAB

Optics

Laser physics

LANGUAGES

English



Italian



INTERESTS

Music

Guitar

Photography

Windsurf

Math

Quantum information

WORK EXPERIENCE

PhD student in Physics LENS - University of Florence

11/2015 – 03/2019

Top publications:

- Josephson effect in fermionic superfluids across the BEC-BCS crossover (Science) [↗](#)
- Exploring the ferromagnetic behaviour of a repulsive Fermi gas through spin dynamics (Nature Physics) [↗](#)
- Repulsive Fermi Polarons in a Resonant Mixture of Ultracold Li-6 Atoms (PRL) [↗](#)
- Connecting dissipation and phase slips in a Josephson junction between fermionic superfluids (PRL) [↗](#)
- Time-resolved observation of competing attractive and repulsive short-range correlations in strongly interacting Fermi gases (PRL) [↗](#)

CERTIFICATES

Deep Learning (2018) [↗](#)

Deep Learning Specialization on deeplearning.ai consisting in 5 courses (Neural Networks and Deep Learning - Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization - Structuring Machine Learning Projects - Convolutional Neural Networks - Sequence Models)

Introduction to Computational Thinking and Data Science (MITx) [↗](#)

Stochastic programming and statistical thinking: Advanced programming in Python 3 - Knapsack problem, Graphs and graph optimization - Dynamic programming - Probability, Distributions - Random walks - Monte Carlo simulations - Curve fitting - Statistical fallacies

The Complete Web Developer Course 2.0 [↗](#)

HTML5 - CSS - JavaScript - JQuery - Bootstrap - PHP - MySQL

Complete C# Unity Developer 2D: Learn to Code Making Games [↗](#)

C# - Unity game engine - object oriented programming

PERSONAL PROJECTS

Code pills website (2017 – Present)

- Collection of tips about data analysis using python and jupyter

Music Arcade (2018 – Present)

- Educational mobile application to improve musical ear

FitWrap

- Custom fitting package in python available on PIP / github

EDUCATION

PhD in Physics University of Florence

2019

Bachelor and Master degree in Physics University of Florence - 110L/110

2015