



# Alessandro Bombini, Ph.D.

Technological & Scientific Researcher 10/07/1991

Theoretical Physicist by formation, I work as a Researcher at the INFN in the network devoted to the application of nuclear techniques to Cultural Heritage, where I am responsible for the research and development of digital infrastructure and web-services.

I am the creator and responsible of Software Development of the *Artificial Intelligence for digital REStoration of Cultural Heritage* (AIRES-CH) Project.

I am the PI for the ICSC Flagship 2.6.1 Fast Extended Computer Vision.

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in Alessandro Bombini

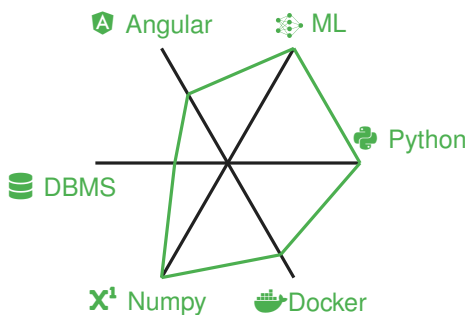
## Soft Skills

- Googling
- Research
- Problem Solving
- Team working
- Fast learning

## Technical Skills

- Python, JavaScript
- Numpy, Scipy, SKLearn, SymPy
- Docker
- Bash
- Neo4j, MongoDB
- Flask, FastApi
- Angular
- TF, Keras, Optuna, PyTorch

## Spider



## Other skills

- Italian: 5 circles
- English: 4 circles
- French: 1 circle

## Experiences

### Tecnologo

2023- INFN

Associate to ICSC; PI for Flagship 2.6.1. Fast Extended Computer Vision. Responsible for the digital development of the AIRES-CH project, offering a web service for AI-based digital restoration of cultural heritage employing nuclear physics-based imaging raw data.

### Scientific Researcher

2022-2023 INFN

Responsible for the research and development of Information and Communication Technologies (ICTs) for the CHNet Cloud in the INFN-CHNet Digital Laboratory.

### Technological Researcher

2020-2022 INFN

Lead developer of the Web services appearing in the CHNet cloud, in charge of devising, writing, and deploying them on the cloud, in an integrated, up-to-date environment. Contributes to the development of Desktop software for the radioprotection system at the Tandatron facility at LABEC, Florence.

### Full Stack Developer

2020 PIN, Prato

Development and upgrade of a web interface and related server service for assisted generation of data and metadata.

### Research Assistant

2019 Stockholm University

Researcher in conformal field theories and black hole physics in string theory.

## Education

### Ph.D. in Physics

2019 Università di Padova

Conducted research in the topic of Theoretical High Energy Physics. Thesis titled "*Black hole microstates and the information paradox*". Final mark: **Excellent**.

### M.Sc. in Physics and Astrophysics

2016 Università di Firenze

Thesis title: "Symmetries on black hole horizon" (Class LM-17). Final mark: **110 cum laude/110**

### B.Sc. in Physics and Astrophysics

2013 Università di Firenze

Thesis title: "Perturbative method in Quantum Mechanics" (Class L-30). Final mark: **110 cum laude/110**

## Activities