



Andrea Vannini

WORK EXPERIENCE

31/03/2019 – CURRENT Pisa, Italy

Software engineer The BioRobotics Institute of Sant'Anna School of Advanced Studies

During my employment for the biorobotics laboratory I have developed the vision software for drones, for the search and interception of a suspended objects.

Developed a communication systems between drones on wifi networks, for the coordinated flight of several drones in the same area.

I supervised and maintained both software and hardware the laboratory computers.

I have collaborated with various contributions to the following projects:

- MBZIRC Mohamed Bin Zayed International Robotics Challenge
- SMASH: Smart Machine for Agricultural Solutions Hightech
- FID-U4E (Smart Factory -- Unity 4 Efficiency) Fabbrica Intelligente Diffusa
- InGene: Development and application of an integrated, multiparametric system for early genetic diagnosis and personalized treatments in children and adults with neuromuscular diseases
- UAVIMALS: 3D Archaeology: a drone capable of detecting and digitally recording unexcavated remains
- VIRMA: Intelligent Robotic Aircraft for Agro-Environmental Monitoring

2022 participated in the Purdue University robotics competition, RI4rover, supervising a team of students teaching them the basics of the ROS system, the principles of automatic navigation and computer vision. Ranked in the top 3

2023 participated in the Purdue University robotics competition, RI4rover, supervising a new team of students teaching them the basics of the ROS system, the principles of automatic navigation and computer vision. Realizing a new state machine for flight control and a new vision system with artificial intelligence. 1st classified

EDUCATION AND TRAINING

19/12/2010 Siena , Italy

SCIENZA E TEORIA DELL'INFORMATICA 26 - Classe delle lauree in scienze e tecnologie informatiche Università degli Studi di SIENA Facoltà di Scienze Matematiche Fisiche e Naturali, Siena (Italia)

Address via Banchi di Sotto 55, Siena , Italy | **Website** <https://www.unisi.it/>

LANGUAGE SKILLS

MOTHER TONGUE(S): Italian**Other language(s):**

English

Listening
C1

Reading
C1

**Spoken
production**
B1

**Spoken
interaction**
B1

Writing
B2

DIGITAL SKILLS

Machine Learning and Deep Learning frameworks Tensorflow Keras PyTorch | Python | Linux | C++ | C | Microsoft Office | LaTeX | Machine Learning | Computer Vision | OpenCv | Proficient in Python Java Javascript C C++ and some knowledge of Matlab | Parallel Programming (CUDA OpenMP)

ADDITIONAL INFORMATION

Driving Licence

- Driving Licence: A
- Driving Licence: B

BLSD - Basic Life Support Defibrillation

16/11/2020 – 27/09/2024

- **BLSD - Basic Life Support Defibrillation**

Cardiopulmonary resuscitation course and use of the semi-automatic defibrillator for all age groups for non-professional personnel