



PROFILE

I'm a biomedical engineer currently pursuing a Ph.D. in Bioengineering. My research applies image processing and AI to enhance image guidance for interventional radiology procedures, in collaboration with the European Institute of Oncology. Over the past year, I've contributed to projects involving soft robotics, aiming to improve solutions for minimally invasive procedures.

CONTACT DETAILS

+39 388 953 2228
@ vanessacanni@gmail.com
<https://www.linkedin.com/in/vanessa-cannizzaro-2a6a2426a/>
Via Washington 35, Caronno Pertusella, IT

PERSONAL INFORMATION

Year of birth: 1999
Citizenship: Italian
Languages: English (proficient), French (elementary), Italian (native)
Driving license: B

WORK EXPERIENCE

- RESEARCH FELLOW at NEARLab Medical Robotics Section (Politecnico di Milano) 2024.09–pres.
◊ Deep learning and augmented reality for interventional radiology.
- EXTRACURRICULAR INTERN (TIROCINANTE) at NEARLab Medical Robotics Section (Politecnico di Milano) 2024.05–2024.09.
◊ Software Analyst (Analista Programmatore) - Control of robot-assisted systems for minimally invasive cardiovascular surgery, as part of the ARTERY European project.
- SALES REPRESENTATIVE at Yves Rocher Italia 2020.06–2024.05
◊ Self-employment contract.
- CURRICULAR INTERN at Novartis 2018.05–2018.06
◊ Research and development.

EDUCATION

- PHD. STUDENT IN BIOENGINEERING, Politecnico di Milano 2024.09–pres.
MSC IN BIOMEDICAL ENGINEERING, Technologies for Electronics (104/110) Politecnico di Milano 2021–2024
◊ Thesis title: Design and Hysteresis Compensation of a Robot-assisted System for Transesophageal Echocardiography.
- BSC IN BIOMEDICAL ENGINEERING (101/110) Politecnico di Milano 2018–2021
◊ Thesis title: A Vessel Segmentation Method in Fluoroscopy Images based on a Deep Residual U-Net Architecture for TAVI procedure.
- SCIENTIFIC HIGH SCHOOL DIPLOMA (98/100) Liceo Scientifico Statale G.B. Grassi 2013–2018

RESEARCH PUBLICATIONS

Journal Articles

- X. Zhang, I. Tamadon, B. I. Fortuno Jara, V. Cannizzaro, A. Peloso, A. Bicchi, A. Aliverti, E. Votta, A. Menciassi and E. De Momi, "DESIGN AND HYSTERESIS COMPENSATION OF A TELEROBOTIC SYSTEM FOR TRANSESOPHAGEAL ECHOCARDIOGRAPHY".
◊ RAL (Robotics and Automation Letters), January 2025.

Conference Proceedings

- V. Cannizzaro, M. Di Mauro, X. Zhang, A. Menciassi, E. Votta and E. De Momi, "DESIGN OF A KNOB ACTUATOR FOR TRANSESOPHAGEAL ECHOCARDIOGRAPHIC PROBE".
◊ CRAS24 (Conference on New Technologies for Computer and Robot Assisted Surgery), September 2024.

SKILLS

- ROS
- Python
- Matlab
- Arduino
- LabVIEW
- SolidWorks
- OpenSim
- SQL
- MS Word, Excel, PowerPoint, Access
- Communication and team collaboration

EVENTS AND WORKSHOPS

- WIRED NEXT FEST 2024, *Milan*
◊ Workshop exploring how robotics, artificial intelligence, and augmented reality can simplify procedures, increase safety, and improve accessibility in cardiac surgery.
- CRAS 2024, *Odense*
◊ Pitch presentation at Conference on New Technologies for Computer and Robot Assisted Surgery.

ABROAD EXPERIENCE

- HASTINGS (UK), *EF Education First* **2015**
◊ Study period for 3 weeks: English grammar lessons and conversation practice.

CERTIFICATIONS

- TOEIC *English* **2021**
◊ Score: 870/990.
- CAMBRIDGE FIRST *English* **2018**
◊ B2 level.

VOLUNTEERING

- AVIS - *Associazione Italiani Volontari del Sangue*: regular blood donor.
- Volunteer work*: active involvement in volunteering at my hometown’s oratory and summer camps.