

## CURRICULUM VITAE



### PERSONAL INFORMATION

Name **ALESSIO NOCERA**  
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Gender Male  
Date of birth MAY 19 1992  
Nationality Italian

### WORK EXPERIENCE

• November 2023 –

#### PH.D. STUDENT

University of Pisa – Department of Information Engineering  
Carried out at EndoCAS Research Center, University of Pisa  
Research project title: ***“Development of methods and applications for the use of commercial Augmented Reality OST HMD devices for precision applications in peripersonal space”***

• April 2023 – October 2023

#### RESEARCH FELLOW

University of Pisa – Research Center “E. Piaggio”  
Carried out at EndoCAS Center, University of Pisa  
***“Development of applications using the game engine Unity3D for surgical applications with Augmented Reality visualization”***

- Game engine with Integrated Development Environment (IDE) Unity3D
- Integrated Development Environment (IDE) Microsoft Visual Studio
- Head-Mounted Display (HMD) Microsoft HoloLens 2
- C# Scripting

### EDUCATION AND TRAINING

• 2023 –

#### PH.D. IN SMART INDUSTRY

**EQF LEVEL 8**

University of Pisa – Department of Information Engineering

• 2018 – 2023

#### MASTER’S DEGREE IN BIOMEDICAL ENGINEERING

**EQF LEVEL 7**

University of Pisa – Department of Information Engineering

2nd level degree – Master’s Degree

Thesis title: ***“Potenzialità del visore Microsoft HoloLens per la simulazione di scenari complessi per il training in ambito sanitario”***

• 2011 – 2018

#### BIOMEDICAL ENGINEERING

**EQF LEVEL 6**

University of Pisa – Department of Information Engineering

1st level degree – Degree/Bachelor

TRAINING COURSES AND  
CERTIFICATES

- April 2024 **UNITY MOBILE AR DEVELOPMENT**  
Unity Technologies
- November 2023 **UNITY VR DEVELOPMENT**  
Unity Technologies
- June 2023 **UNITY JUNIOR PROGRAMMER**  
Unity Technologies
- April 2023 **INDUSTRY 4.0 LEARNING PATH**  
University of Pisa
- March 2023 **UNITY CREATIVE CORE**  
Unity Technologies
- August 2021 **UNITY ESSENTIALS PATHWAY**  
Unity Technologies
- April 2020 **MINI-COURSE MDR 2017/745**  
Easy Medical Device
- October 2019 **III CONGRESSO NAZIONALE IDBN ITALIAN DIGITAL BIOMANUFACTURING NETWORK**  
IDBN.org
- October 2019 **2019 AFRICAN BIOMEDICAL ENGINEERING CONSORTIUM (ABEC) DESIGN SCHOOL**  
Uganda Industrial Research Institute (UIRI)
- July 2019 **STAMPA 4.0 – I EDIZIONE**  
*“Stampa 2D/3D per la realizzazione di prodotti innovativi, sensori, sistemi wearable e dispositivi IoT”*  
University of Pisa
- February 2008 **ECDL STANDARD**  
AICA (Associazione Italiana per l’informatica ed il Calcolo Automatico)

**PERSONAL SKILLS**

- NATIVE **ITALIAN**
- FOREIGN LANGUAGE(S)

- English
- French
- German

UNDERSTANDING		SPEAKING		WRITING
LISTENING	READING	SPOKEN INTERACTION	SPOKEN PRODUCTION	
B2 INDEPENDENT	B2 INDEPENDENT	B2 INDEPENDENT	B2 INDEPENDENT	B2 INDEPENDENT
A2 BASIC	A2 BASIC	A1 BASIC	A1 BASIC	A1 BASIC
A1 BASIC	A1 BASIC	A1 BASIC	A1 BASIC	A1 BASIC

*CLI CERTIFICATE FOR A1 LEVEL (UNIVERSITY OF PISA)*

DIGITAL COMPETENCES

SELF-ASSESSMENT				
INFORMATION PROCESSING	COMMUNICATION	CONTENT CREATION	SAFETY	PROBLEM SOLVING
PROFICIENT USER	PROFICIENT USER	INDEPENDENT USER	PROFICIENT USER	PROFICIENT USER

**DIGITAL COMPETENCE:** OPERATING SYSTEMS [MICROSOFT WINDOWS, UBUNTU, LINUX, ANDROID] (EXCELLENT), PROGRAMMING LANGUAGES [C/C++, C#, MATLAB] (GOOD), OFFICE TOOL [WORD, EXCEL, POWERPOINT] (EXCELLENT), **CAD SKILLS** [FUSION 360°, SOLIDWORKS] (GOOD), INTERNET SKILLS (EXCELLENT), MULTIMEDIA (GOOD), **PHOTOGRAPHY AND PHOTO-EDITING** [PHOTOSHOP, GIMP] (EXCELLENT), **3D ELABORATION AND MODELLING** [CREO, MESHLAB, BLENDER] (EXCELLENT), **SLICING SOFTWARE** [CURA] (EXCELLENT), **IDE** (UNITY3D, MICROSOFT VISUAL STUDIO) (EXCELLENT)  
**THEORETICAL AND PRACTICAL KNOWLEDGE** OF SOME OF THE MAIN AUGMENTED REALITY AND VIRTUAL REALITY SYSTEMS (HOLOLENS, MAGIC LEAP, OCULUS GUEST, GOOGLE GLASS, PSVR, HTC VIVE)  
**THEORETICAL KNOWLEDGE** OF THE MAIN ROBOTIC SYSTEMS OF SURGICAL AND/OR RADIOLOGICAL ASSISTANCE

HONOR & AWARD

**HELGLASK - WEARABLE**

Preliminary, conceptual, and theoretical studies. Project designed for participation in the UBORA Design Competition 2020 “Open-source medical technologies for the integral management of COVID-19 pandemia and infectious disease outbreaks”

**CERTIFICATE OF PROJECT AWARD**

For winning Second Place at the 2019 African Biomedical Engineering Consortium (ABEC) Design School at the Uganda Industrial Research Institute (UIRI)

PRIOR WORK EXPERIENCE

- June 2016 – March 2023

**PANE E VINO DI LUGLIANI & C. SNC**

Piazza C. Gambacorti 7, Pisa (PI)

- **MENU, PROMOTIONS CREATOR/DESIGNER**
- **WAITER**
- **CLIENTS RECEPTIONS**
- **SUPPORT FOR THE PREPARATION OF DISHES**

DRIVING LICENCE

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ADDITIONAL INFORMATION

PUBLICATIONS

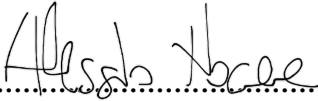
- *Proof of Concept of Using HoloLens 2 for AR Immersive Training in Complex Medical Scenarios*, accepted at the 2023 IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (October 2023)
- *Docking of the Da Vinci Surgical Robot Using Mixed Reality*, accepted at the 2023

IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (October 2023)

CERTIFICATIONS

- Best Live Demonstration at the 2023 IEEE MetroXRaine
- German language certificate CLI (A1 level)

*I hereby authorize the processing of the personal data contained in this CV in compliance with the European Regulation (UE) 2016/679.*

  
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