

## Code B\_2491

<b>Department</b>	Literatures, Languages and Cultural Heritage
<b>UniCa reference person</b>	Antioco Luigi Zurru
<b>Project title in English</b>	The use of educational robots and Artificial intelligence as a new frontier in higher education contexts
<b>Project title in Italian</b>	L'uso di robot educativi e Intelligenza artificiale come nuova frontiera nei contesti di istruzione superiore
<b>Subject area of reference (World University Ranking)</b>	SOCIAL SCIENCES (inc. Education, Law, Politics & International Studies, Sociology, Psychology, Geography)
<b>Project summary and VPS' profile</b>	<p>The rapid advancements in educational technology have brought about transformative changes in higher education. Two emerging technologies, educational robots and artificial intelligence (AI) are garnering attention for their potential to enhance teaching and learning. Educational robots provide interactive and immersive learning experiences through hands-on activities, employing sensors, actuators, and intelligent programming. They enable experiential learning in multiple disciplines, simulate real-world scenarios, promote collaboration and critical thinking, and personalize instruction to cater to individual student needs. Complementing the capabilities of educational robots, AI contributes intelligent algorithms and data analysis. AI-powered systems can process vast amounts of educational data, including student performance and preferences, to provide valuable insights. Despite challenges, the use of educational robots and AI holds immense potential in higher education. The VPS should be a leading expert in speech technologies, biomedical engineering, machine learning, and digital signal processing together with educational technology. The VPS' research focuses on applying engineering expertise to Assistive Technologies (AT), robotic systems and education. The VPS will allow to leverage the knowledge in the topic to facilitate innovative teaching methodologies, increase student engagement, and offer personalised learning experiences. Moreover, the knowledge on such technologies will bridge the gap between theory and practice, fostering critical thinking, problem-solving skills, and preparing students for future workforce demands.</p>
<b>Proposed length of stay</b>	Short visit of 10 days
<b>Expected period of activity</b>	March - May 2024
<b>Academic position of the VPS'</b>	Researcher
<b>Course of Study</b>	Laurea magistrale (2nd cycle University Degree), Laurea magistrale a ciclo unico (5-6-year Master Degree), Dottorato di ricerca (PhD Course)
<b>Language of instruction</b>	English