

## Olmo Ceriotti

## WORK EXPERIENCE

August 2025 – Present

**AI Developer**

BabelScape

Via Claterna 2, Rome, Italy

Development of AI models and data processing pipelines

March 2025 – May 2025

**NLP Engineer**

Microsoft &amp; FabLab

Fine-tuning of AI agents and knowledge base management

## EDUCATION AND TRAINING

2024–Present

**Master of Science Engineering in Computer Science and Artificial Intelligence LM-32** ISCED 7

University Sapienza of Rome, Rome, Italy

- Multilingual Natural Language Processing
- Computer Vision
- Deep Learning
- Cybersecurity

2021–2024

**Bachelor of Science in Computer Science L-31**

University of Milano-Bicocca, Milan, Italy

Grade: 110L

- Programming Languages
- Distributed Systems
- Object Oriented Programming

2023–2024

**Erasmus Program**

AGH University, Krakow, Poland

- Embedded Artificial Intelligence
- Functional Programming Languages
- Cryptography

## PROJECTS

May 2025 – Jul 2025 **Connected Culture**  
Speha Phresia  
Created a web platform for discovering Palermo, combining an extensive tourist information database with georeferenced mapping powered by OpenStreetMap. Designed the frontend in React to deliver an engaging and intuitive user experience.

Dec 2025 – Feb 2025 **Atlante Pinocchio**  
Sapienza University of Rome  
Built the backend and PostgreSQL database for a research portal monitoring the translations and reception of Collodi's \*Pinocchio\* in Middle and Far Eastern countries using Django. Incorporated georeferenced mapping for translation and publication data.

Feb 2025 – Sep 2025 **ArchiPlus**  
OpenHouse Rome  
Created a web and AR platform for exploring the architectural heritage of Rome and Lazio within the Open City Roma App (PNRR, EU-funded). Developed the frontend in Next.js, implemented AR using AR.js, and integrated georeferenced map support for site locations.

Mar 2025 – Present **D.I.V.E.R.S.I.T.Y. – Digital Initiative for Valuing Ethnic Resources and Social Integration through TechnologY**  
DigiLab, Sapienza University of Rome  
Developing a web platform for the D.I.V.E.R.S.I.T.Y. project, focused on geolocated mapping of ethnic enterprises in Rome and Lazio. The initiative fosters cultural diversity and social inclusion through technology, supporting diversity management in urban and peri-urban areas. Responsible for backend development and database architecture.

Jan 2025 – Feb 2025 **Universitas**  
Sapienza University of Rome  
Built a repository platform for student projects and theses using Drupal, allowing efficient access, organization, and management of academic content.

Feb 2025 – Oct 2025 **Persian Dictionary**  
Sapienza University of Rome  
Built the backend and PostgreSQL database for an Italian–Persian dictionary platform using Django, ensuring efficient storage, retrieval, and management of lexical data.

Dec 2024 – Oct 2025 **PRIN MetriCa**  
Sapienza University of Rome  
Created a web platform and database for the Metrical Inscriptions of Campania project, supporting interdisciplinary research on more than 300 Greek, Latin, and bilingual inscriptions. Developed the frontend in React, the backend and CMS in JavaScript, and managed the PostgreSQL database.

Jan 2025 – Sep 2025 **PRIN Frame Medievalism**  
Italian Historical Institute for the Middle Ages  
Designed and built a web platform and database for analyzing Italian Medievalism (1980–present). Developed the frontend in React, the backend in Express.js, and a MySQL database with an admin panel. Integrated natural language search using the Gemini API and implemented georeferenced data visualization on a map.

Mar 2025 – Present	<b>P.A.S.T. in Coast</b> Centro Universitario Europeo per i Beni Culturali, Ravello Developing the technological components of the “P.A.S.T. in Coast” project, focusing on the digitalization of cultural heritage materials, the design and implementation of the database and GIS infrastructure, and the development of digital exhibition solutions such as virtual tours and virtual museums.																		
Jun 2025 – Present	<b>Greek Inscriptions of Turin</b> Sapienza University of Rome & Musei Reali di Torino Developing a pilot digital platform to enhance and promote the Greek inscription heritage of Turin, fostering collaboration between the Department and the Musei Reali di Torino – Museo di Antichità. The project seeks to define a digital strategy for the valorization, dissemination, and interactive exploration of the city's Greek epigraphic heritage.																		
Dec 2023 – Jul 2024	<b>Heterogeneous Graph Neural Network for Action Prediction on Egocentric Action Scene Graphs</b> University of Milano-Bicocca Exploring heterogeneous graph neural networks for action prediction on the Egocentric Action Scene Graphs (EASG) dataset. Focused on identifying architectures that capture node relationships effectively, demonstrating GNN potential and establishing a baseline for future research.																		
Mar 2025 – July 2025	<b>DeepFake Detection and Adversarial Robustness Analysis</b> Sapienza University of Rome Developed a notebook for DeepFake detection and adversarial robustness analysis, evaluating EfficientNet and its variants. Key features include configurable model architectures, training hyperparameters, and support for logging metrics and visualizations with WandB, enabling systematic comparison of performance and robustness against attacks like FGSM and PGD.																		
Mar 2025 – July 2025	<b>Neural Networks for 3D Breast Cancer Detection</b> Sapienza University of Rome Developed a deep learning project for 3D breast cancer detection in Digital Breast Tomosynthesis (DBT) scans, comparing multiple neural network architectures. Implemented ResNet3D (CNN baseline), Swin3D (Vision Transformer), multi-view attention variants, and a novel HypercomplexDBT classifier using PHNNs for inter-view correlation. Evaluated models using the BCS-DBT dataset with performance comparison, anomaly detection, and Grad-CAM interpretability analysis.																		
Mar 2025 – July 2025	<b>Multiclass Classification of Cultural Items</b> Sapienza University of Rome A dual-approach project for classifying cultural items using a fine-tuned SBERT+SVM model and a feature-engineered XGBoost classifier.																		
<b>PERSONAL SKILLS</b>																			
Mother tongue	Italian																		
Other languages	<table border="1"> <thead> <tr> <th></th> <th colspan="2">UNDERSTANDING</th> <th colspan="2">SPEAKING</th> <th>WRITING</th> </tr> <tr> <th></th> <th>Listening</th> <th>Reading</th> <th>Spoken interaction</th> <th>Spoken production</th> <th></th> </tr> </thead> <tbody> <tr> <td>English</td> <td>C2</td> <td>C2</td> <td>C2</td> <td>C1</td> <td>C1</td> </tr> </tbody> </table>		UNDERSTANDING		SPEAKING		WRITING		Listening	Reading	Spoken interaction	Spoken production		English	C2	C2	C2	C1	C1
	UNDERSTANDING		SPEAKING		WRITING														
	Listening	Reading	Spoken interaction	Spoken production															
English	C2	C2	C2	C1	C1														

(International English Language Testing System) IELTS C1					
Spanish	A2	A2	A2	A2	A2
<u>Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user</u>					
<u>Common European Framework of Reference for Languages</u>					
<b>Communication skills</b>	<ul style="list-style-type: none"> <li>– Team work: I have collaborated closely with colleagues in both technical and debate environments, contributing to group projects in software development and team-based debate competitions.</li> <li>– Public speaking and argumentation: My experience in competitive debate has strengthened my ability to communicate complex ideas clearly, think critically under pressure, and present persuasive arguments to diverse audiences.</li> <li>– Technical communication: As a developer, I gained experience translating technical concepts into clear, accessible language for clients, project managers, and non-technical stakeholders.</li> <li>– Interpersonal and intercultural skills: Through collaboration with international debate teams and cross-functional development groups, I have developed adaptability and cultural awareness in diverse professional and academic settings.</li> </ul>				
<b>Organisational skills</b>	<ul style="list-style-type: none"> <li>– As a debate team leader, I organized practice sessions, coordinated team participation in tournaments, and mentored junior members to improve their analytical and public speaking skills.</li> <li>– In my previous role as a developer, I managed small project teams, planned development timelines, and ensured effective coordination between technical and non-technical stakeholders.</li> <li>– Experienced in managing multiple priorities, meeting deadlines, and maintaining structured workflows in both academic and professional environments.</li> </ul>				
<b>Driving licence</b>	B				
<b>Technical Skills</b>	<ul style="list-style-type: none"> <li>– <b>Web Development:</b> ReactJS, AngularJS, Hugo, Flask, HTML5, CSS3, JavaScript, TypeScript</li> <li>– <b>Web Design:</b> UX/UI design, responsive design, accessibility and usability testing, Figma, Adobe XD</li> <li>– <b>WebGIS:</b> Leaflet, CesiumJS, Mapbox, QGIS integration</li> <li>– <b>3D Visualization:</b> Three.js, WebGL, Blender</li> <li>– <b>Backend Development:</b> Python, Node.js, RESTful APIs, JSON, SQL, NoSQL, PostgreSQL, MongoDB</li> <li>– <b>Version Control:</b> Git, GitHub, GitLab</li> <li>– <b>Deployment:</b> Linux, Nginx, Docker, GitHub Actions, CI/CD</li> <li>– <b>Data Management:</b> data modeling, metadata standards, digital humanities datasets, cultural heritage databases</li> <li>– <b>Artificial Intelligence:</b> TensorFlow, PyTorch, Scikit-learn, OpenCV, Hugging Face Transformers, computer vision, NLP, data analysis</li> <li>– <b>Research:</b> interdisciplinary collaboration, documentation</li> </ul>				
<b>Certifications</b>	<ul style="list-style-type: none"> <li>– <b>System Design Fundamentals by Design Guru</b></li> <li>– <b>Partecipation Galileo Festival Academy</b></li> <li>– <b>Partecipation at Microsoft and FabLab Project</b></li> </ul>				
<b>Publications</b>	<i>Olmo Ceriotti, Federico Gerardi, Saverio Giulio Malatesta, Silvia Orlandi, Language Modeling for Epigraphs: a BERT model for EDR's Latin Epigraphs text completion, IEEE CyberHumanities, 2025 - In Press</i>				