

PROJECT ACRONYM AND TITLE: PYthiaPlus - Machine Learning for the Study of Ancient Epigraphic Cultures

FUNDING PROGRAMME: HORIZON 2020

CALL: H2020-MSCA-IF-2020 - Marie Sklodowska-Curie - Standard European Fellowship

DESCRIPTORS: Numismatics, epigraphy, Ancient history, Computational modelling and digitisation in the cultural Sphere, Historiography, Theory and methods in history, including the analysis of digital data, Textual philology, Palaeography and epigraphy

HOST DEPARTMENT: Department of Humanities

SCIENTIFIC RESPONSIBLE: Lorenzo Calvelli

FELLOW: Sommerschield Thea

FINANCIAL DATA:

Project total costs	Overall funding assigned to UNIVE
€ 171.473,28	€ 171.473,28

ABSTRACT:

PythiaPlus proposes to explore and interpret the nature of the epigraphic cultures of the ancient Mediterranean using Artificial Intelligence. Specifically, it will use Machine Learning (ML) models to trace distinctiveness and change in the Greek and Roman epigraphic evidence on an unprecedented large scale and in unparalleled detail, revealing new insights in linguistic and cultural interactions. Inscriptions are primary evidence for reconstructing the history and thought of the ancient world, due to their large number and variety in content. However, the chronological development and regional diffusion of inscriptions are not uniform. No print or digital resources exist allowing a precise quantification of inscriptions by time and place, and current approaches are generally confined to specific languages or localised case studies. Recent advances in ML can overcome these limitations: ML is a field of Artificial Intelligence that allows statistical models to discover patterns in large datasets, and learn meaningful representations of them. Because such models can train over vast amounts of data, they can overcome the limitations in quantification and breadth of analysis of current resources and approaches. By revolutionising our ability to access and analyse the epigraphic data through the implementation of advanced digital technologies, this research will enable and undertake the interpretation of the epigraphic patterns and parallels discovered by ML models across the texts and metadata of thousands of Greek and Latin inscriptions. PythiaPlus will transform our understanding of the use of epigraphic communication and the nature of cultural interference within the written and indirectly spoken languages of the ancient world, making a substantial contribution to the study of Epigraphy and the Historical Sciences.

Planned Start date	Planned End date
1 st September 2021	31 th August 2023

BENEFICIARY: