



# USE AND CHALLENGES OF AI IN ARCHAEOLOGY

ARTIFICIAL INTELLIGENCE - BIG DATA - REMOTE SENSING - AUTOMATIC MACHINE LEARNING

# ARCHAEO- INFORMATICS

25-26 NOVEMBER 2024

“THE INTEGRATION OF ARTIFICIAL INTELLIGENCE (AI) INTO ARCHAEOLOGICAL RESEARCH AND PRACTICE HAS USHERED IN A NEW ERA OF DATA ANALYSIS AND INTERPRETATION. THIS FUSION OF TRADITIONAL ARCHAEOLOGY AND MODERN TECHNOLOGY ALLOWS FOR THE EFFICIENT ANALYSIS OF LARGE AMOUNTS OF DATA FROM EXCAVATIONS, REMOTE SENSING, AND ARCHIVAL SOURCES. ARCHAEO-INFORMATICS 2024 EXPLORES THE DIVERSE APPLICATIONS OF AI IN ARCHAEOLOGY, INCLUDING AUTOMATED IMAGE RECOGNITION TO IDENTIFY ARTEFACTS, PATTERN RECOGNITION TO MAP SETTLEMENT STRUCTURES, AND PREDICTION OF FIND SITES THROUGH MACHINE LEARNING. BY USING AI TECHNIQUES, ARCHAEOLOGISTS CAN GAIN NEW INSIGHTS, IDENTIFY PREVIOUSLY HIDDEN PATTERNS, AND HYPOTHESE ABOUT PAST SOCIETIES AND CULTURES. THIS WORK DEMONSTRATES HOW THE USE OF AI IN ARCHAEOLOGY HAS THE POTENTIAL TO DEEPEN OUR UNDERSTANDING OF THE PAST AND IMPROVE THE EFFICIENCY OF ARCHAEOLOGICAL INVESTIGATIONS.”

THIS EXAMPLE, WHICH WAS CREATED WITH CHATGPT 3.5 AND TRANSLATED FROM GERMAN INTO ENGLISH WITH DEEPL 24.2.2, GIVES A SMALL INSIGHT INTO THE POSSIBILITIES OF AI.

HOWEVER, THE POTENTIAL OF AI WILL CHANGE, OR HAS ALREADY CHANGED, MANY AREAS OF ARCHAEOLOGICAL RESEARCH. KEYWORDS RELATED TO ARCHAEOLOGY AND AI ARE DATA MANAGEMENT, BIG DATA, AUTOMATIC CLASSIFICATION OF ARTEFACT ANALYSES, OR ROBOTICS IN THE FIELD. METHODS AND TASKS THAT ARE ALREADY IN DAILY USE IN ARCHAEOLOGICAL PROJECTS. BUT WITH ALL THE POTENTIAL, THIS TECHNOLOGY ALSO HAS A HUGE RESPONSIBILITY, ESPECIALLY IN TERMS OF DATA QUALITY, COMPLEXITY OF INTERPRETATION, ETHICS AND EDUCATION. WHERE SHOULD WE DRAW THE LINE?

WE INVITE YOU TO JOIN US IN DELIBERATING ABOUT THE USE AND CHALLENGES OF ARTIFICIAL INTELLIGENCE IN ARCHAEOLOGY. WE WELCOME PAPERS ON TOPICS ABOUT THE UTILIZATION OF AI IN ARCHAEOLOGICAL PROJECTS AND RESEARCH, FIELDWORK AND TRAINING ARCHAEOLOGISTS. THE APPLICATION OF AI IN OUR CULTURAL MEMORY INSTITUTIONS IS ONE AREA THAT HAS SEEN INCREASED TRACTION RECENTLY. THEREFORE, WE ARE ALSO KEEN TO RECEIVE CONTRIBUTIONS FROM COLLEAGUES WORKING IN THE GLAM SECTOR.

THE CONFERENCE (PLANNED AS A HYBRID MEETING) WILL TAKE PLACE ON 25 - 26 NOVEMBER 2024 AT THE DEPARTMENT OF SETTLEMENT ARCHAEOLOGY OF THE MIDDLE EAST TECHNICAL UNIVERSITY (METU) IN ANKARA. TRAVEL AND ACCOMMODATION COSTS CANNOT BE COVERED BY THE CONFERENCE.

EXTENSION OF THE SUBMISSION DEADLINE UNTIL 25 AUGUST 2024! PLEASE SEND YOUR ABSTRACT (MAX. 200 WORDS) TO [ARCHAEOINFORMATICS@DAINST.DE](mailto:ARCHAEOINFORMATICS@DAINST.DE) FOR FURTHER QUESTIONS PLEASE CONTACT US AT THE SAME EMAIL ADDRESS.

With your registration you agree that your data and your abstract can be published on the Digital public relation channels (Websites, Facebook, Instagram etc.) of the German Archaeological Institute, the Middle East Technical University and the British Institute at Ankara in the context of the event.

# CALL FOR PAPERS



GERMAN ARCHAEOLOGICAL INSTITUTE - ISTANBUL DEPARTMENT  
METU GRADUATE PROGRAM IN SETTLEMENT ARCHAEOLOGY/DIGITAL ARCHAEOLOGY MSC.  
BIAA - BRITISH INSTITUTE AT ANKARA



BIAA British  
Institute  
at Ankara