

My future is in Russia

1 READING Archaeoinformatics: A Modern Archaeological Profession

Archaeoinformatics is a **cutting-edge** field that combines archaeology with information technology, focusing on the digital processing, analysis, and visualization of archaeological data. This profession is essential in modern archaeological research, heritage management, and **public engagement**. An archaeoinformatician works with tools like Geographic Information Systems (GIS), 3D modeling software, database management systems, and **remote sensing technologies** (e.g., drones, LiDAR, satellite imagery). These tools help collect, store, analyze, and interpret **spatial** and contextual data about archaeological sites and artifacts.

This profession requires **interdisciplinary knowledge** — combining skills from archaeology, computer science, geography, and statistics. It's particularly valuable in large-scale research projects and collaborative international studies.

Archaeoinformatics also plays a role in digital **heritage preservation**. By digitizing fragile artifacts and archaeological records, archaeoinformaticians help protect cultural

heritage from **physical decay**, conflict, and climate change. Their work supports both academic research and public access to heritage through virtual museums, mobile apps, and educational tools.

As technology advances, archaeoinformatics continues to evolve, offering exciting opportunities to reshape how we explore, document, and understand the past.

cutting-edge – передовой,

ультрасовременный

public engagement – привлечение
общественности

remote sensing technologies –
технологии дистанционного
зондирования

spatial – пространственный,
территориальный

mapping excavation data –
картографирование данных раскопок

trade networks (trade routes) –
торговые пути

interdisciplinary knowledge –
междисциплинарное знание / навык

heritage preservation – сохранение
наследия

physical decay – физическое
разрушение

Discuss in pairs:

- Which technologies used in archaeoinformatics do you find most interesting, and why?
- How do you think archaeoinformatics changes the way we understand the past?
- What are the advantages and possible limitations of using digital tools in archaeology?
- Would you consider pursuing a career in archaeoinformatics? Why or why not?



2 SKILLS Profile cases

Do the tasks according to your field of studies.

Case 1: Lost City Detected

Scenario: A satellite image reveals strange rectangular patterns in a forested area.

Your team of archaeoinformaticians is asked to analyze the data.

Task:

- Decide which tools you will use (e.g., GIS, LiDAR, drone surveys).
- Predict what kind of site it might be (village, fort, temple complex).
- Present a short action plan for further investigation.

Case 2: Digital Museum Exhibit

Scenario: You are hired by a museum to create an interactive digital exhibit of an ancient burial site. The only data you have is excavation records and some 3D scans.

Task:

- Choose how to present the site (VR tour, 3D model, web map, mobile app, etc.).
- Define what information should be included for different audiences (e.g., children, researchers).
- Suggest how to make the exhibit both educational and engaging.

Case 3: Climate vs. Heritage

Scenario: An ancient coastal site is at risk due to sea level rise and erosion. You are part of a team assessing how to digitally preserve the site before it disappears.

Task:

- List which archaeoinformatic methods can help document and preserve the site.
- Discuss the ethical and practical challenges of “digitally saving” cultural heritage.
- Propose a plan for long-term data storage and public access.