Syennesis to Aristotle, 2400 Years on: The Implications of the Machine Learning Revolution in Medicine for the Future of Humanities Research

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In the last two decades, machine learning and data science have revolutionised medical research from top to bottom. Surprisingly, many phenomena studied by scholars of the humanities share the same fundamental patterns as those studied by medical scientists, and are therefore likely to benefit from the rich array of methods and tools developed in the field of computational medicine. Scholarship in the humanities therefore stands at the precipice of a similar revolution, as the availability of ever-richer data sets drives powerful and unexpected advances across domains from philology to archaeology.

In this talk, we look at some of the most pressing research questions across the humanities and assess how computational analysis methods from medicine could provide new insights and be applied to these areas of study. We present tools and takeaways that our diverse audience of humanities scholars, scientists, and other academics can use in their own research. The examples highlighted here present just a preview of the possibilities that will emerge when humanities scholars, scientists, mathematicians, and engineers collaborate and build upon each other's work.