SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

[RE]IMAGINE EDUCATION

A weekly Design·AI newsletter

FRANKENSTEIN, AI AND DIGITAL HUMANITIES

HASS Special Issue

Associate Professor, Alastair Gornall, HASS

In conversation with Dr. Nachamma Sockalingam, OSP

Associate Professor Alastair Gornall, HASS

https://www.sutd.edu.sg/profile/alastair-gornall/

In this HASS special issue, we turn to *Frankenstein* to ask what AI and Digital Humanities can mean in the age of AI.

At first glance, Mary Shelley's novel may seem far removed from today's generative tools, chatbots, text analytics, and digital archives.

Yet its questions feel strikingly current: What does it mean to create? Who is responsible for what we make? What happens when our creations begin to speak, act, and influence others?

Through Associate Professor Alastair Gornall's **Introduction to Digital Humanities** course, students explore these questions not only by reading *Frankenstein*, but by using digital methods to analyse, interpret, and even reimagine it.

In doing so, they encounter AI not just as a tool, but as a mirror — one that reflects our assumptions about authorship, creativity, evidence, bias, and responsibility.

So perhaps the deeper question is this: in an age where machines can generate, imitate, classify, and persuade, what human foundations must guide us?

Editor of Newsletter:
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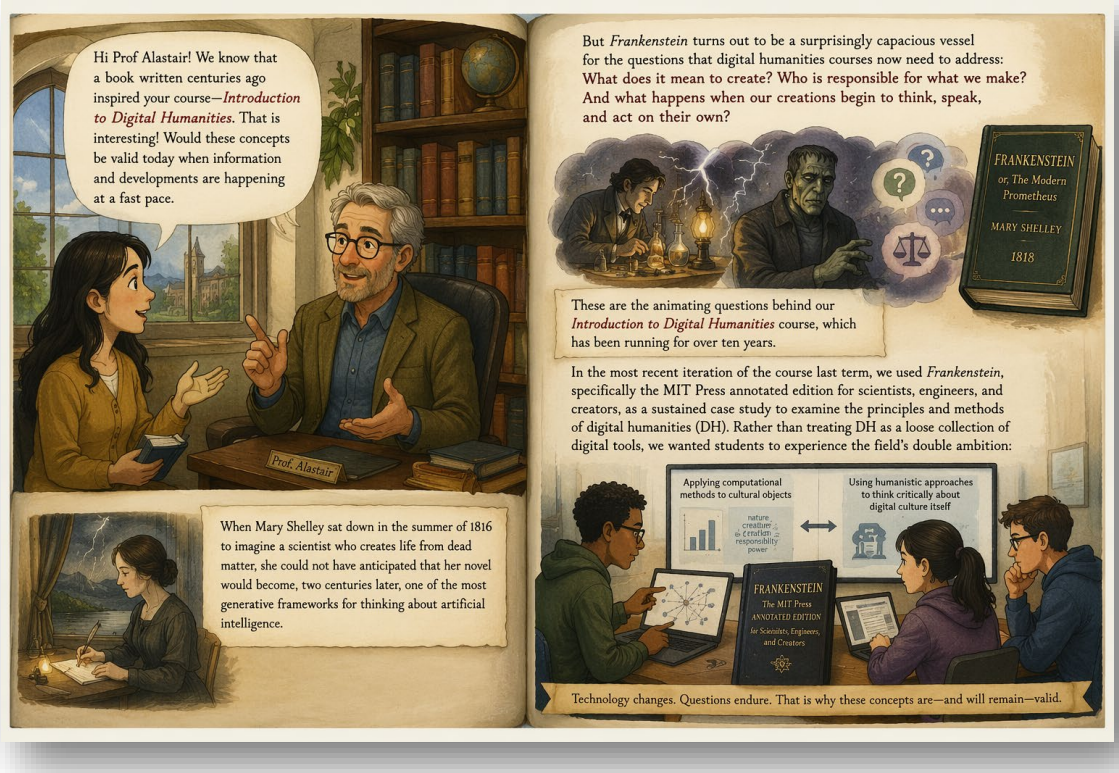
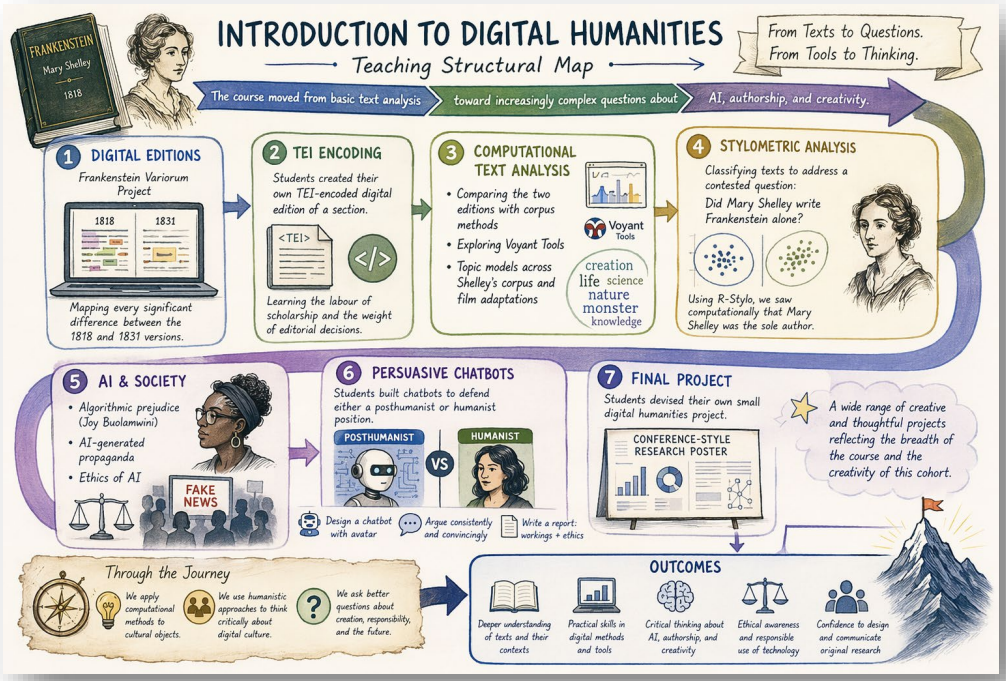
Hi Prof Alastair! We know that a book written centuries ago inspired your course- Introduction to Digital Humanities. That is interesting! Are these concepts still valid today, when information and developments are moving so quickly?

When Mary Shelley sat down in the summer of 1816 to imagine a scientist who creates life from dead matter, she could not have anticipated that her novel would become, two centuries later, one of the most generative frameworks for thinking about artificial intelligence. But *Frankenstein* turns out to be a surprisingly capacious vessel for the questions that digital humanities courses now need to address: ***What does it mean to create? Who is responsible for what we make? And what happens when our creations begin to think, speak, and act on their own?***

These are the animating questions behind our ***Introduction to Digital Humanities*** course, which has been running for over ten years. In the most recent iteration of the course last term, we used *Frankenstein*, specifically the MIT Press annotated edition for scientists, engineers, and creators, as a sustained case study **to examine the principles and methods of digital humanities (DH).** Rather than treating DH as a loose collection of digital tools, we wanted students to experience the field's double ambition: applying computational methods to cultural objects while using humanistic approaches to think critically about digital culture itself.



How did you engage your students in this course?



The course moved from basic text analysis toward increasingly complex questions about AI, authorship, and creativity. Early sessions introduced students to digital scholarly editions through the Frankenstein Variorum Project, which maps every significant difference between the 1818 and 1831 versions of the novel. Students created their own TEI-encoded digital edition of a section of *Frankenstein*, learning at first hand both the extraordinary labour of textual scholarship and the interpretative weight of editorial decisions. From there, we moved into computational text analysis: comparing the two editions of *Frankenstein* using corpus methods, exploring Voyant Tools, and running topic models across Shelley's corpus and its film adaptations. By mid-term, students were classifying texts using stylometric analysis, tackling the genuinely contested scholarly question of whether Mary Shelley wrote *Frankenstein* alone, or whether Percy Shelley's contributions were substantial enough to challenge her sole authorship. Using the R-Stylo package, we saw computationally that Mary Shelley was clearly the sole author of the novel.

The course then turned more directly toward AI. We read about algorithmic prejudice through Joy Buolamwini's work, examined how AI-generated propaganda operates on readers, and, in what became the most enjoyable but technically challenging sessions of the term, students built persuasive chatbots to defend either a posthumanist or humanist position: machine intelligence will eclipse human capacities, or it will not. They had to design a chatbot, complete with a visual avatar, that argued consistently and convincingly for their assigned view, and then write a report that demystified its workings and articulated an honest ethical framework for what they had built. The final assignment asked students to devise their own small digital humanities project and present it as a conference-style research poster. The range of what emerged reflected both the breadth of the course and the creativity of this particular cohort. Two projects deserve special mention.

Could you tell us about your students' learning experiences?

Tippana Sai Siddarth Reddy's project, "Playing Frankenstein," is a digital retelling of Shelley's novel in which the reader's choices generate new narrative pathways, except that those pathways are written not by the student but by a language model trained specifically on the corpus of Mary Shelley's writings. The result is seventy possible versions of *Frankenstein*, all generated in imitation of Shelley's prose style, that readers can explore through an interactive branching interface. The project is playable at frankenstein-interactive-branching.netlify.app. It raises, in a beautifully direct way, one of the central questions of the course: **if a machine can write convincingly in a dead author's voice, what exactly is it that we value in that voice? Is it the cognitive labour? The lived experience? The historical position? Or just the stylistic surface?** Siddarth's project makes such questions experientially inescapable in a way that no reading assignment could.

The second project, by Keefe Chua Rui Zhe and Lee Shaw Kiat, is called "The Anti-Mirror." The concept is deceptively simple: you describe the kind of image you want to see, and the application generates two images side by side, one that corresponds to your request and one that deliberately inverts it, converting your stated preferences into their opposites. Warm becomes cold, peaceful becomes tense, and elegant becomes crude. The application is live at the-anti-mirror.vercel.app. What makes it more than a novelty is its conceptual argument: that AI image generation is typically a mirror held up to desire, an engine of self-confirmation that surfaces and flatters existing taste. The Anti-Mirror forces a confrontation with what you didn't ask for, making visible the assumptions embedded in the very act of prompting. It is a small, critical machine, and a genuinely funny one to use.

What are your reflections on this experience?

What the two projects together illuminate is something the best digital humanities work always makes visible: **that computation opens onto artistic possibilities that could not have existed before, while simultaneously closing others we did not know we valued.** Siddarth's various, branching Frankensteins could not have been written by a human hand, not in any meaningful timeframe, perhaps not at all, and yet they exist, readable, stylistically coherent, genuinely surprising.

The Anti-Mirror works differently and more subversively. Most AI image generation is frictionless by design: you describe, it delivers, your preferences confirmed and flattered. Keefe and Shaw Kiat's project deliberately reintroduces friction, forcing an encounter with the image you didn't want and the assumption you didn't realize you were making. There is something important in that gesture. We are living through a moment in which computation promises to remove every obstacle between intention and outcome. But some of that friction is often where the best thinking happens.

This HASS special issue reminds us that Digital Humanities is not simply about bringing digital tools into the humanities, but about asking what the humanities must become in a digital age. If AI can read, write, imitate, classify, and persuade, then the basis of our judgment cannot be speed, fluency, novelty, or convenience alone. It must rest on deeper foundations: context, evidence, interpretation, historical awareness, ethical reasoning, and care. These foundations help us ask not only whether an AI output works, but what it means, whose voices it carries or excludes, what assumptions it embeds, and how it shapes the human worlds it enters. For faculty, students, staff, and the wider SUTD community, this is the real challenge of Design·AI: to use AI with capability and discernment, to innovate without abandoning care, and to remain mindful of the consequences of what we create.