

Algorithms & Computational Politics:

Where they can take us

MUNCIE, Ind. — Imagine a world where battles fought in the political arena were padded with more information, data, and statistics. Where political teams are no longer reliant upon the messy practice of prediction, and instead utilize a firm expanse of knowledge in order to produce marketing schemes, campaigns, and rallies. This is what the emerging field of computational politics aims to do.

In the simplest sense, computational politics is the intersection of computer science and political science. More specifically, the field can be defined as, “... the study of computational methods to analyze and moderate users’ behaviors related to political activities such as election campaign persuasion, political affiliation, and opinion mining” (Haq et al.)

However, in order to understand how the future of politics is going to be shaped by this relatively new discipline, it is first salient to understand the very basics of computer science. Computers — which are electronic devices that have the ability to store and retrieve data and make calculations based on that information — lie at the heart of this discussion; and, for computers to be able to arrive at the calculations they are designed to produce, they utilize algorithms, which are sets of rules to be employed in problem solving sequences.

Though simple in theory, algorithms and the computers that use them are often far from basic, and while many algorithms are observable in nature, many more are manufactured by humans in order to solve a specific problem. For example, algorithms nowadays have been engineered in a way that not even their creators can describe exactly what goes on beyond from a purely technical standpoint. These “black box” algorithms as they are now called function by identifying correct examples of things the researcher wants it to recognize, and soon enough they develop their own neural networks that allow them to note trends in order to categorize things it has never had experience with prior (Blouin).

For all their benefits and improvements though, there does exist a limit to what algorithms can do. Dr. Steven Hall, an associate professor of political



science with concentrations in international relations and comparative politics at Ball State University in Muncie, Indiana, warns about using them too heavily in America politics: “So, you’ve heard that the senate is a deliberative body, in other words, there’s not one technical set of things they have to do,” Hall said. “Instead, they’re deciding what’s the best policy or choice that does these things, and through that we that we learn and understand and shape our interests and our thinking by way of exchanging views. Well, what happens when we lose that process? Frankly, why should anyone show up in the in the Senate anymore if we used AI for that purpose? Let’s just have the computers talking to one another. It’s analogous to the question that we asked of students using chat GPT to write papers. By writing papers, we frame, build, and wrestle with ideas, and if I press a button that doesn’t happen.”

Indeed, although it may seem like there is an algorithm for every situation, that does not automatically mean that the use of that algorithm should be permitted without restrictions. Just last year, the United States Supreme Court heard — though declined to rule on — its first case regarding algorithms

in *Gonzalez v. Google LLC*, which was to determine if social media companies could be held liable for their algorithms providing harmful targeted recommendations.

Although no decision was obtained since *Gonzalez v. Google* was vacated and remanded, the fact that it managed to travel all the way up to the nation’s higher court in the first place is indicative of the possibility that future cases regarding the subject are likely to follow while the usages and bounds of algorithms are tested further, since the legal roles that algorithms may play in education, the work place and in business are all yet to be determined.

Clearly, the heyday of algorithms is finally upon us and with it comes a new wave of computers. That being said, more than one cloud dots the horizon of innovation as legal and political issues regarding this technology are called into question. Still, to avoid utilizing it entirely would be a disservice to progress itself — after all, just imagine how the ripples of this wave could change the innumerable ways in which we conduct ourselves, politically and otherwise.

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By: Sarah Olsen | snolsenebsu.edu