Relationships

A survey of recent machine learning papers shows a focus on bounding the contexts of algorithms to a specific domain. People believe that if "if designed well, algorithms have a chance to undo human fallibility." (Ludwig & Mullainathan, 2021) The inputs and the outcomes are looked at as if they can exist in isolation. That is not to say that looking at the flaws within those contexts isn't useful. But looking at algorithms and what they do with data in isolation or using too focused of a lens is harmful because history manifests itself in that data, and restricting our lens ignores some of those harms. The harmful relationships between humans in past and present presents itself as the numbers produced by econometrics, social sciences, government administration, etc.

These manifestations are only part of story as the data used is often "incomplete, not fully representing either the objectives or the information that decision-makers possess. For example, judges rely on much more information than is available to algorithms, and judges' goals are often not well-represented by the outcomes provided to algorithms." (Ludwig & Mullainathan, 2021)

There is no context fraught with more error and bias than our so-called justice system, which makes it the perfect context to look where these problems rear their heads. In addition to historical biases recorded in data, designers fail to understand how people will interpret the predictions put forth by algorithms and sufficiently account for that in their design.

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