

CSC665: Fairness, Bias

When ML is presented
around “accuracy”, what
does that do?

A Scenario: Home Loans

Racial Covenants

The West 120 feet of the South 132 feet of Tract twelve (12), Lake Washington Garden Tracts, subject to and with rights of ingress and egress over the following described easement for road purposes:

The North 12 feet of the South 132 feet of Tract eleven (11), and the North 12 feet of the West 225 feet of the South 132 feet of Tract twelve (12), and the North 16 feet of the West 32 feet of the East 105 feet of the South 132 feet of Tract twelve (12) of Lake Washington Garden Tracts.

This sale is made subject to the following restrictions which are independent each from the other and the invalidity of one shall not defeat the others:

(1) Vendees and their successors in interest may build or construct on the property described in this deed a single family dwelling house to be used for residence purposes only, together with such other out buildings as may be desired and reasonably necessary, provided they first secure the approval of the Grantors herein to the plans and location of said dwelling and other buildings.

(2) The residence built on this property shall be set back from the side boundaries of this said property not less than six (6) feet and from the

South property line not less than 50 feet.

(3) No trees, shrubs or other ~~such~~ obstruction shall be placed on this said property or permitted to grow thereon beyond a height of 20 feet.

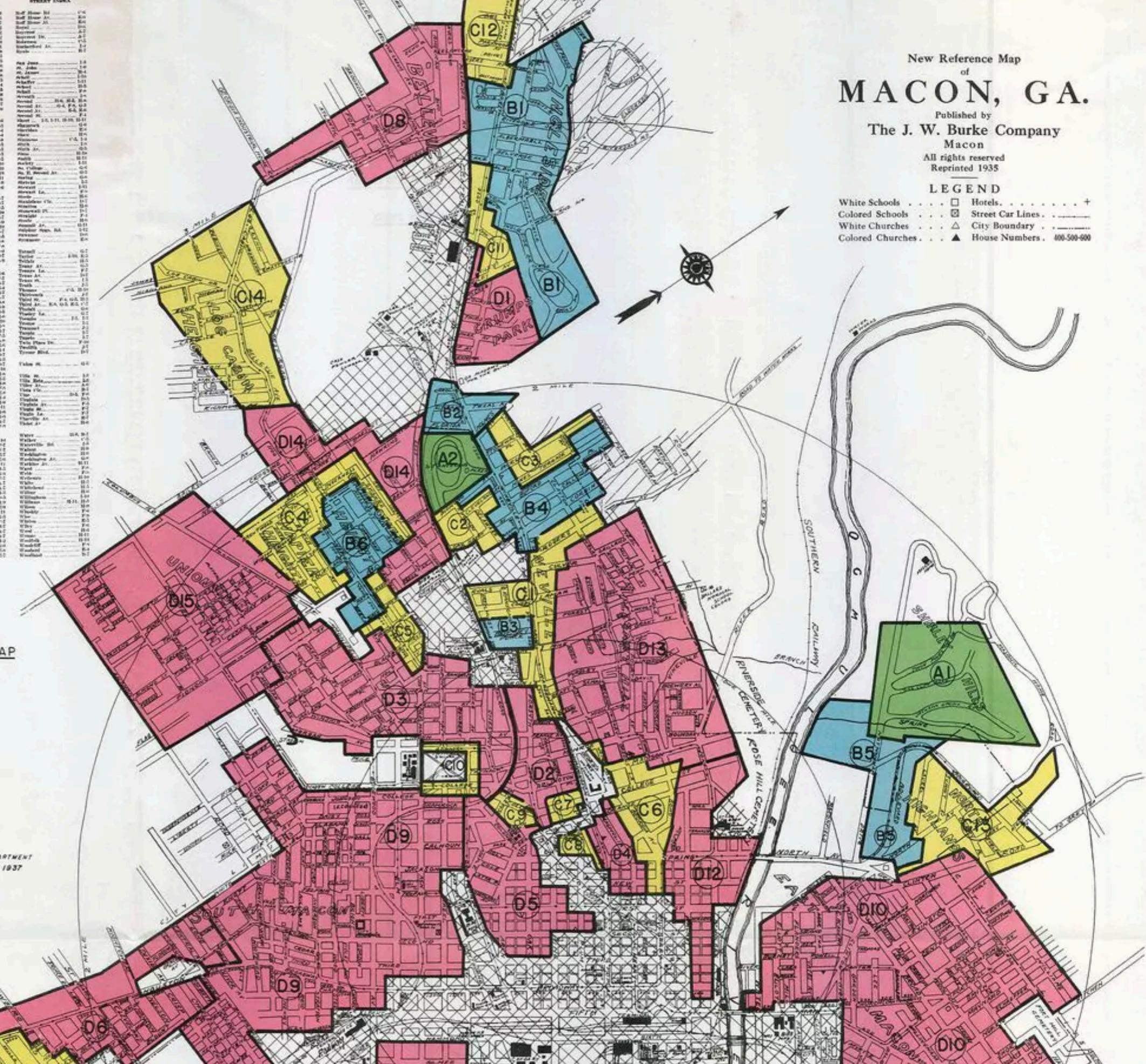
(4) This said property shall not be resold, leased, rented, or occupied except to or by persons of the Aryan race.

xobjccxx

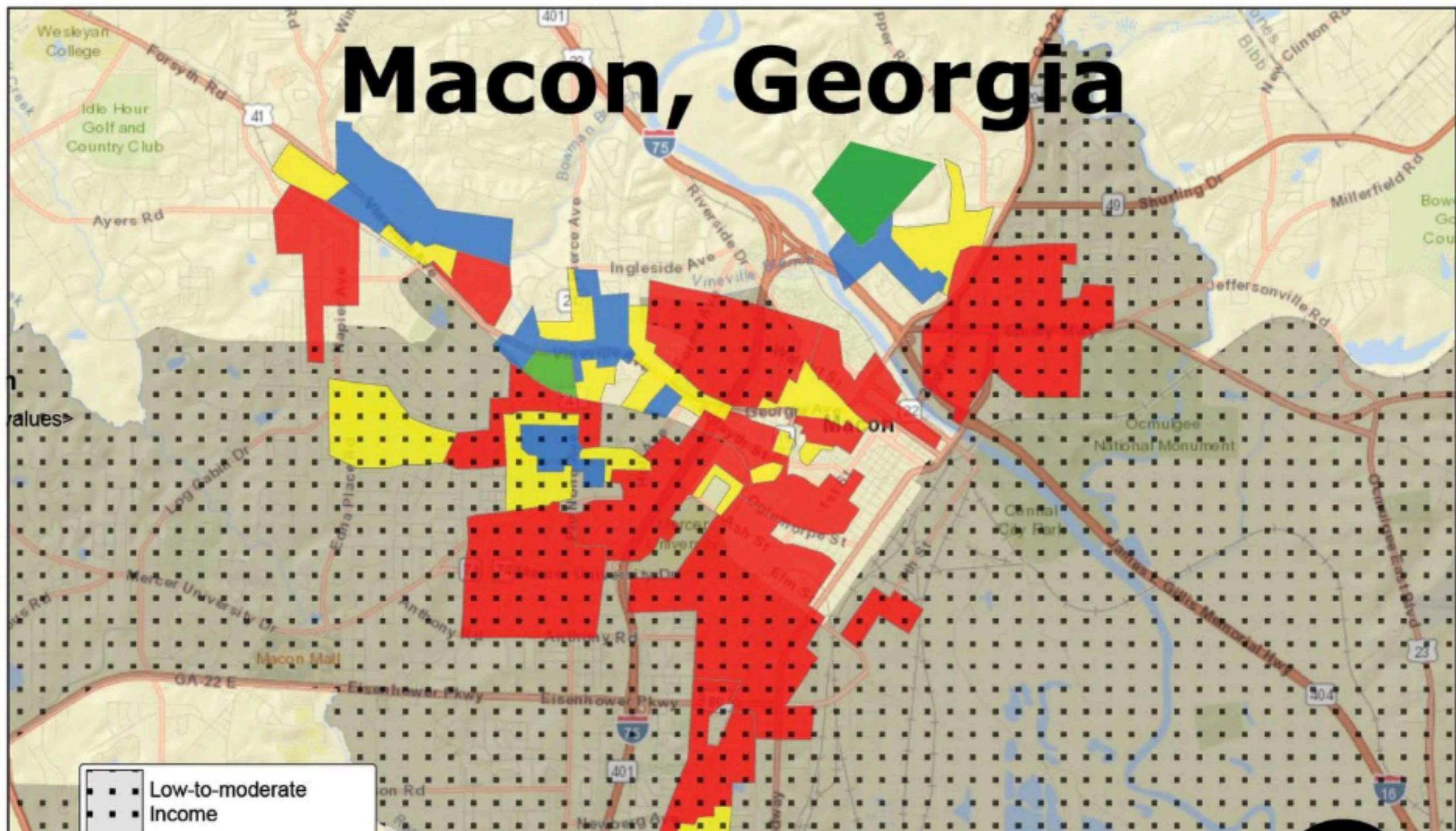
Dated this 3rd day of September, 1946.

J. D. Jordan Smith, Jr.

Red-lining



In Macon today, 91 percent of redlined neighborhoods are inhabited by mostly minorities; 73 percent of such neighborhoods remain low-to-moderate income, researchers found. Whites, on the other hand, remain the overwhelming majority in Macon neighborhoods deemed “best” in the 1930s — all of which remain middle-to-upper income.



What happens if you
only seek “accuracy”?

What are the
alternatives?

Ideas that do not work

- Blame the data collection process
 - “It’s not the algorithm, it’s the data”
- Drop the sensitive label
 - “It’s not looking at gender, so it can’t be discriminatory”

Ideas that sort-of work

- Add new design goals, encode these into your model selection process
 - “similar people should be treated similarly”
 - “misclassification error should be independent of sensitive attribute”
 - “entire process should be independent of sensitive attribute”