Lumos: Increasing **Awareness** of Human **Biases** during Visual Data Analysis

Arpit Narechania, Adam Coscia, Emily Wall, and Alex Endert

Overview

Lumos helps people make more informed decisions by making them aware of unconscious biases that drive their data analyses. By setting target distributions for a decision, people can maintain awareness if their analysis process does not reflect their goals.

Scenario

E.g., you are assessing **credit applications** that determine if a person can be approved for a loan.

Several biases may come into play...

Applications

Lumos can be used across multiple domains to tackle, e.g.,

- Age bias in loan applications,
- Gender bias in C-suite promotions,
- Racial bias in parole applications.

How often do you look at specific attributes?

Set your **encodings**, **filters** and **visualize** your data

How much focus do you give to your data points?

Set **target distributions** for your analysis

More details to help you find **insights**

anarechania3@gatech.edu