Team 4

**Reducing Bias in Automated Resume Review System**

**Introduction & Problem**

Many companies use AI to automate the screening stage in the hiring pipelines in hope of hiring quality candidates because it is less costly and time consuming. However, AI systems or machine learning produce a set of rules (algorithms) that attempt to use past data (often filled with human biases) to predict future applicant performance. Some of the problems include the following: losing qualified candidates (especially from non-traditional backgrounds), inadvertent privacy violations that reinforces social biases of race, gender, sexuality, and ethnicity, and hiring non-qualified candidates that might seem like a good fit to the AI system.

Broadly speaking, there are four stages in the hiring p­rocess: sourcing, screening, interviewing, and selection. The screening stage involves evaluating applicants— offering the “best” candidates for the company. Algorithmic screening is the most active area of development and often the most consequential, as it represents the major filter through which applicants increasingly must pass. As a result, we aim to improve the AI resume screening process.

**Goal**: Our goal is to retrain and create a more inclusive AI resume review system that does not discriminate against any particular group of people.

**Setting**: Professional Hiring Platforms

**Functions and Utilities:**

* Quickly and efficiently analyse a prospective employee’s resume
* Hold prospective employees to company standards without including historical or institutional bias in the hiring decisions
* Have datasets with diverse candidates (which can be used to develop better rules or algorithms)

**Team Work Plan:**

* Data Flow Diagram and Entity Relationship Diagram - Sagar and Ruthwik
* Research and Visualizations - Kristian and Victoria
* Database and Data Cleaning - Victoria and Ruthwik
* Powerpoint Generation - Kristian and Sagar
* Video Presentation - All

**Timelines:**

October 8 - Send proposal

November 15 - Compile research and develop database

December 15 - submit deliverables