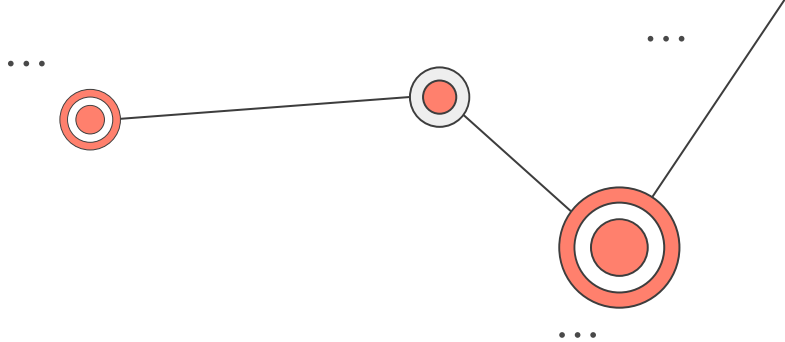




# Unmasking Bias: In Pursuit of Fairness

An attempt at reducing  
Bias





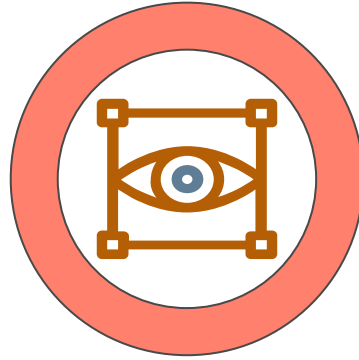
# MEET THE TEAM

**PV ADWAITH  
DEVANAND A  
AFSAL TS  
SIDDHARTH S**



# Introduction





# Bias

In today's world, ensuring the accuracy and fairness of research is paramount. Hidden biases in research materials can lead to skewed results, which in turn affect policies, business strategies, and academic integrity.

...

# Types of Biases



## Sampling Bias

When the sample chosen for the study is not representative of the population, leading to skewed results.

...



## Confirmation Bias

The tendency to favour information that confirms existing beliefs or hypotheses.

...



## Observer Bias

When the researcher's expectations influence the outcome of the study.



## Social Desirability Bias

When participants respond in a manner they believe is socially acceptable rather than how they truly feel.

...

## STORY OF DR. LIAM CARTER



Dr Liam Carter reads through his ground breaking work linking air pollution to respiratory diseases

# AN UNEXPECTED CHALLENGE



A call from the journals editor reveals shocking Biases in his research

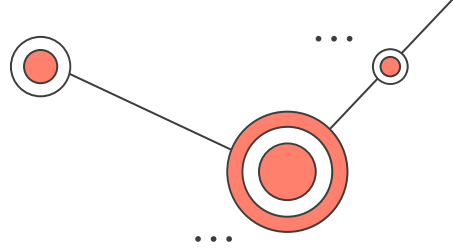


# The Problem at Hand



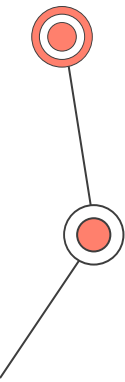


# Problem Statement



“DETECT AND ADDRESS BIASES IN TEXTS, PROMOTING FAIRNESS IN TEXT DOCUMENTS”

Biases can severely undermine research validity. Detecting and eliminating these biases is a significant challenge, highlighting the need for a reliable solution.





**SOLUTION**

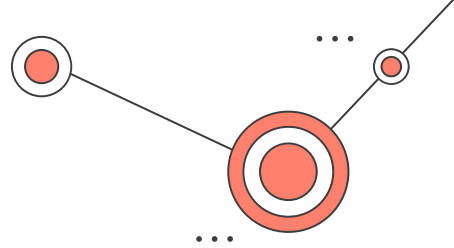




# A REVOLUTIONARY SOLUTION

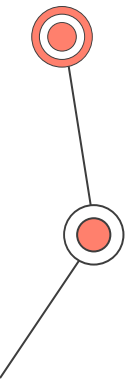
***BIAS DETECTOR*** - a groundbreaking tool designed to detect and address biases in academic papers and other documents by analyzing citations and identifying biased patterns, thereby ensuring transparency and promoting rigorous, unbiased research practices.

# WHAT DOES THE MODEL DO?

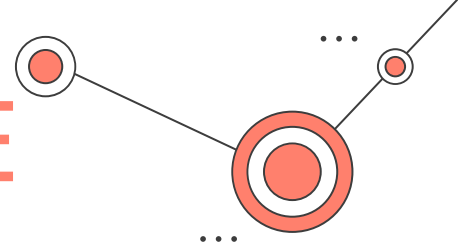


The Model does its magic by:

- Extracting text from pdf,
- Summarizing the given text ,
- Finding the biased sentences and classifying them into known categories.
- Ranking each of the biased sentences and explaining what the bias is with respect to the text

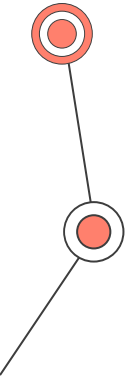


# TYPES OF BIAS DETECTED BY THE DEVICE

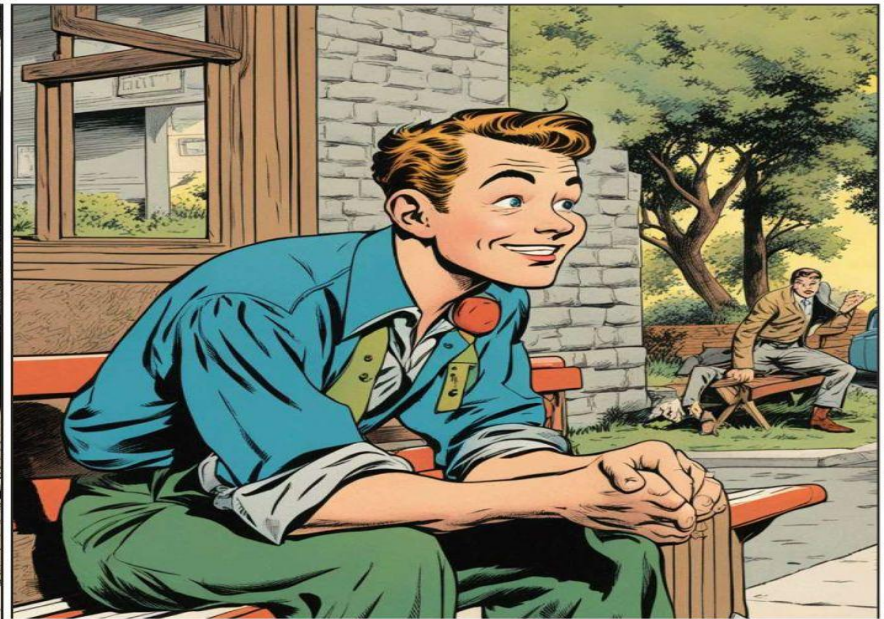


The device's niche nature identifies:

- Confirmation Bias
- Publication Bias
- Selection Bias
- Cognition Bias

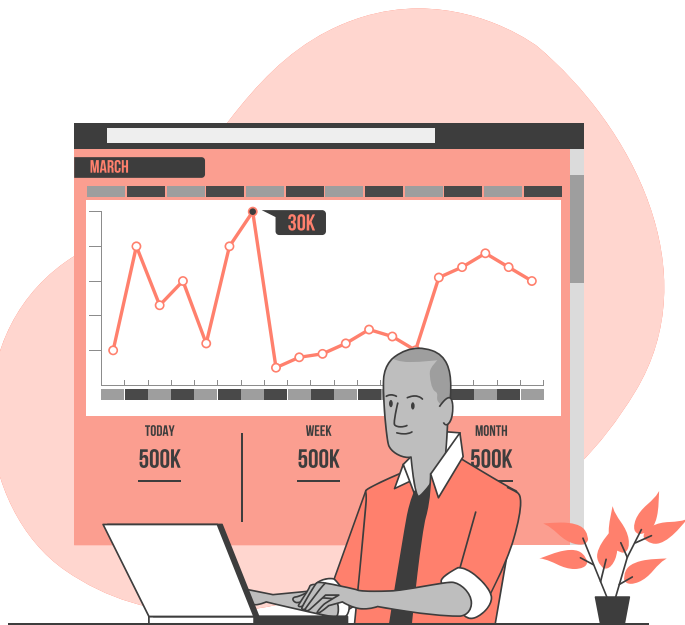


# UNCOVERING THE TRUTH WITH BIAS DETECTOR, LIAM FINALLY KNOWS PEACE



Thanks to Bias detector Liam corrected his mistakes and regained his reputation

# What Impact will our project have?



## Enhanced Research Integrity

- Ensures accuracy and reliability of findings
- Boosts credibility of academic publications

## Informed Decision-Making

- Provides accurate data for policymakers and businesses
- Improves outcomes in healthcare, education, and public policy

## Efficient Research Processes

- Automates bias detection, saving time and effort
- Accelerates scientific discovery and innovation

# What Impact will our project have?

## Promotion of Fairness and Equity

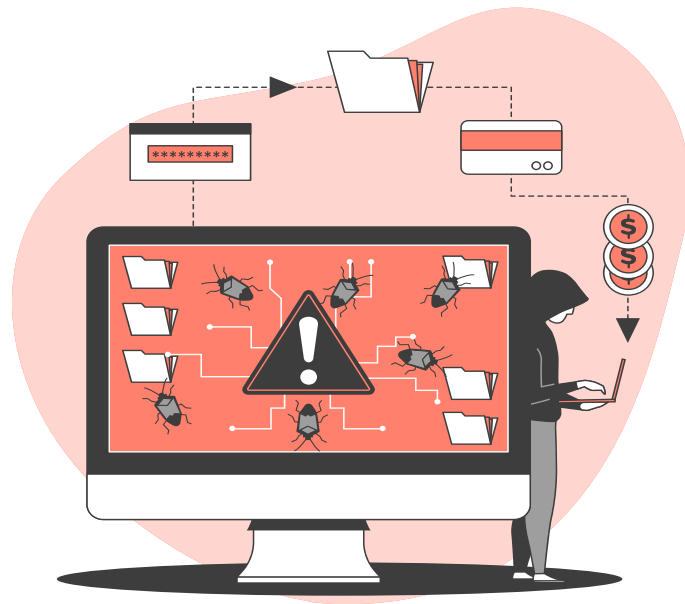
- Addresses disparities affecting marginalized groups
- Ensures diverse perspectives in research

## Educational Benefits

- Teaches future researchers to recognize and address biases
- Fosters critical thinking and ethical practices

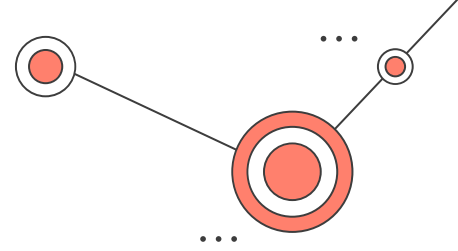
## Broader Application

- Applicable across various fields beyond behavioral science
- Enhances overall quality of research in multiple disciplines

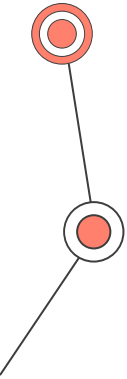




# CONCLUSION



Detecting and eliminating biases is vital for credible research. The Bias Finder promotes unbiased research, and we encourage all researchers to adopt such tools, striving for honesty and transparency in all scientific endeavors





# Thanks!

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