

Pitch Deck

GENERATIVE AI & DL FOR APPLICANTS' DASHBOARD

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OUR MISSION

To analyze candidates through their social media data and further strengthen insights using psychometric tests.

We also employ AI in generating personality dashboard of an applicant.



COMPREHENSIVE OVERVIEW



Sentiment Analysis
Positivity



MBTI Classification
Personality



Red Flags Identification
Sexism/Hate Speech



Big 5 Psychometric Test
Behavior analysis



Skill Analysis
Qualification



Report Generation
Generative AI

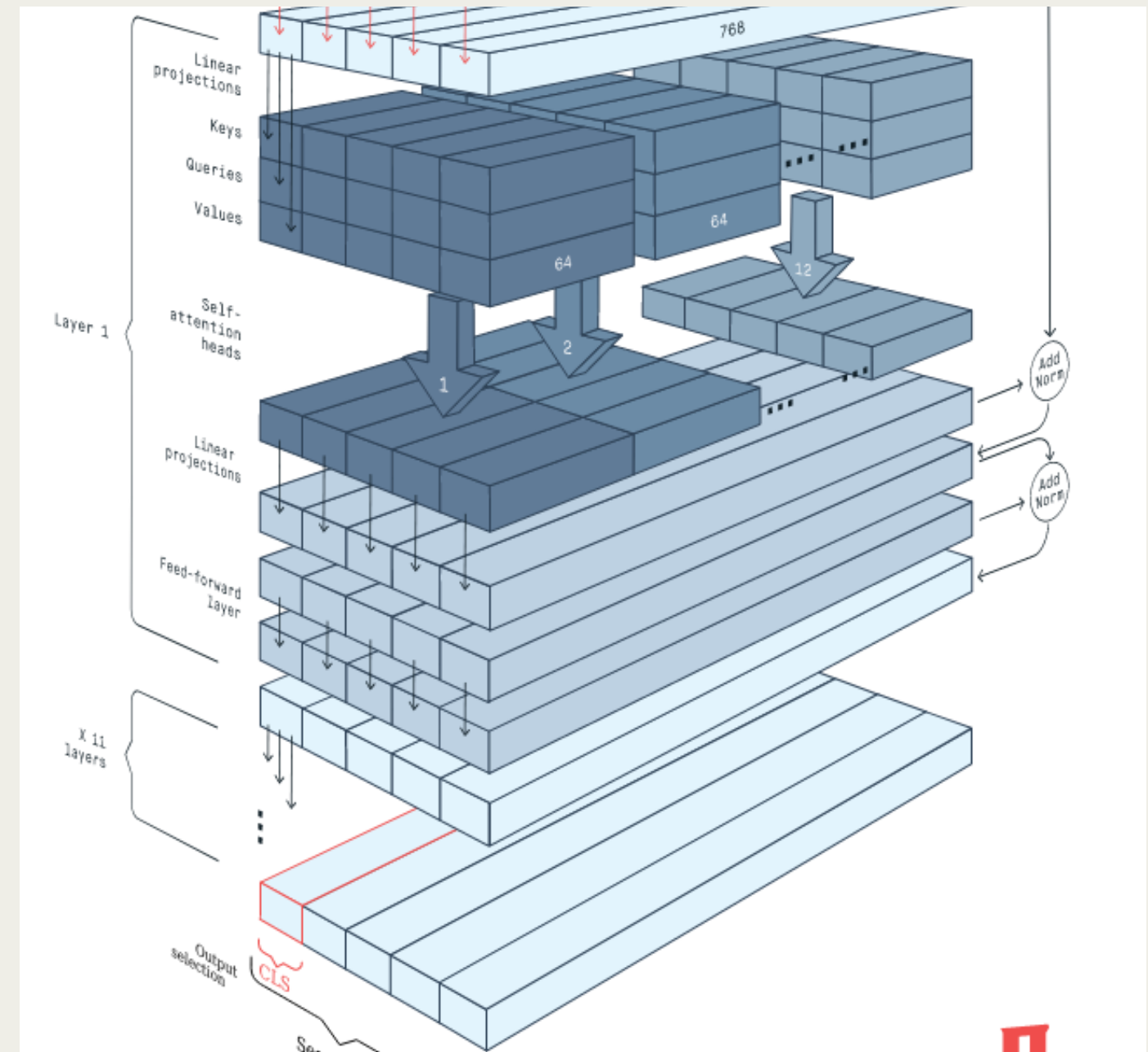


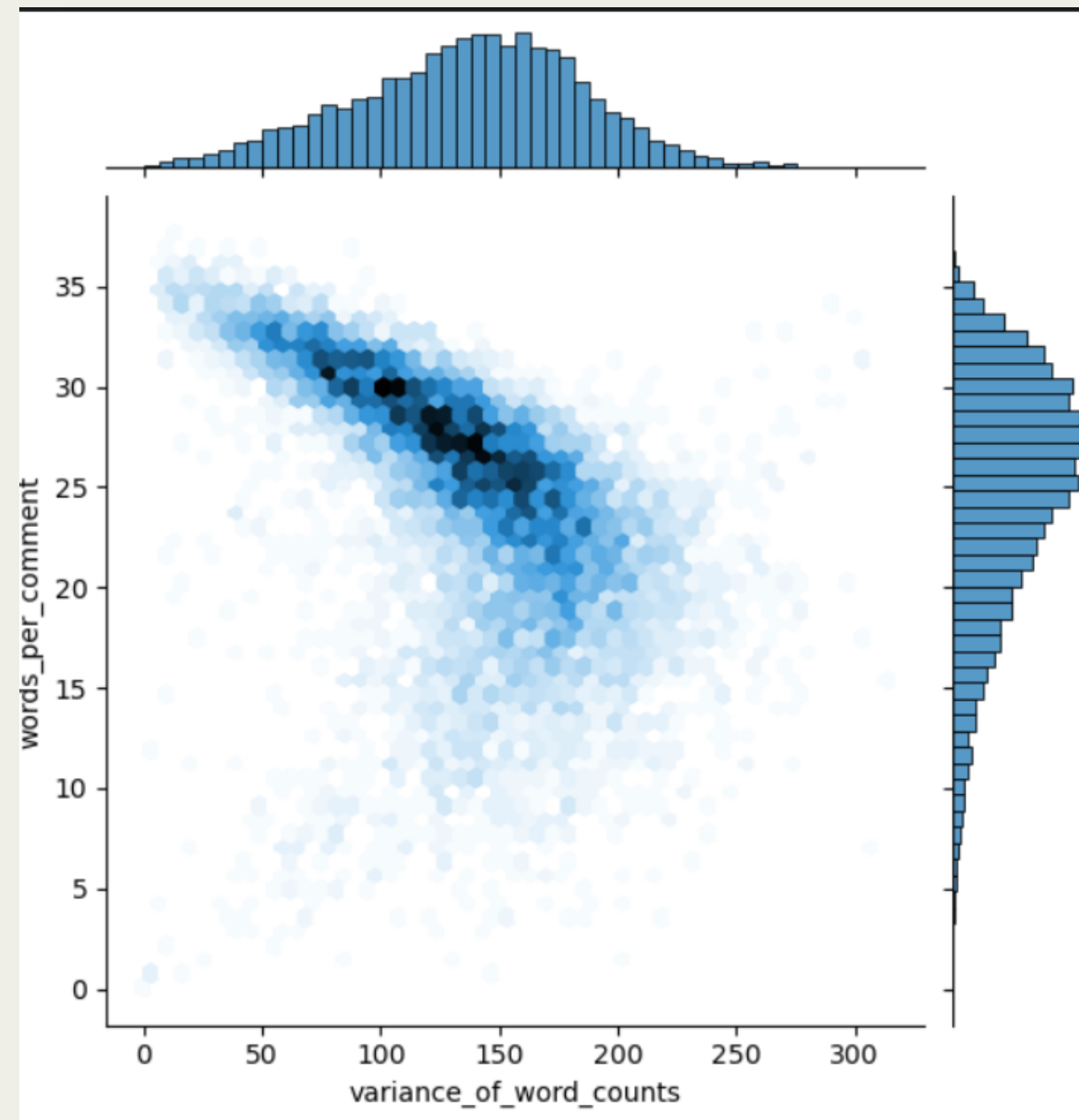
SENTIMENT ANALYSIS

- Uses BERT architecture to predict positivity in a sentence.
- Assigns values to 3 classes: Negative, Neutral, and Positive
- Use social media data to predict an applicant's data

RED FLAGS

- Look for obvious red flags in a potential candidate.
- Red Flags: Sexism, Hate Speech
- Uses Transformer architecture





MBTI CLASSIFICATION

- Uses Linear Support Vector Classifier for it's model architecture.
- Predicts between 16 possible classes.
- Applies on all available data and uses to get better output.



BIG 5 PSYCHOMETRIC TEST

- Uses a set of 50 questions in the questionnaire with 5 possible answers.
- A standard algorithm finds the score for the 5 traits.
- Results from the Big 5 test are used for giving useful insights using Generative AI.



REPORT GENERATION

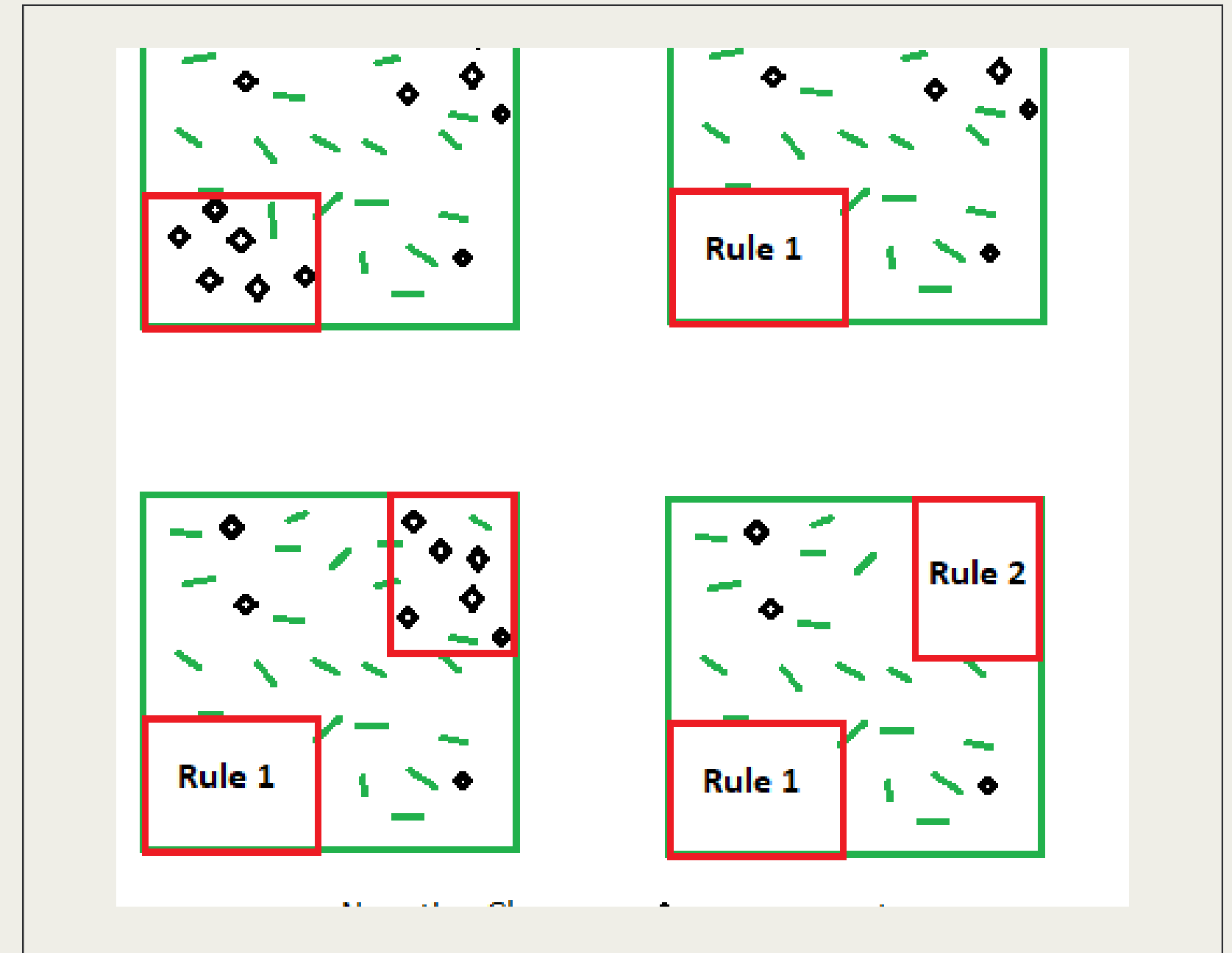


- We utilize Meta's Large Language Model Llama 2 for report generation.
- Output of other ML models are passed to Llama 2 to generate human digestible character report of applicants.
- We generate the report and present insights on sentimental analysis, MBTI personality and red flags.
- Further, we use the scores of Big 5 to provide valuable perspectives and improve the output of our application.



SKILL ANALYSIS

- Data is scraped from LinkedIn to get the skills of a person.
- We used a rule-based system to list out the suitable jobs for this person.
- This information is also provided in the report.
- This makes it easier for a recruiter to factor in skills while considering social compatibility.



FUTURE EXPANSIONS

The following features are those that we would have liked to work on if given ample time.



PLANS

ML Analysis for Big 5

We believe that tests can be biased when the interviewee has their interest in mind.

Hence, using ML-based techniques similar to the ones we have used here can be a possible solution.

Gathering data from other social media websites

Unlike the USA, India does not rely on Twitter as much. This means there is scope to utilize other social media websites for data gathering in the Indian context.

Graphical Connect Analysis

We can analyze the connections/followers of a user to figure out their personality and groups they associate with at a deeper level. This can result in very interesting outcomes.



REFERENCES

- <https://huggingface.co/blog/sentiment-analysis-python>
- <https://www.ijert.org/research/personality-analysis-using-social-media-IJERTCONV9ISo3066.pdf>
- <https://huggingface.co/cardiffnlp/twitter-roberta-base-sentiment-latest>
- https://sites.temple.edu/rtassessment/files/2018/10/Table_BFPT.pdf

Thank you!

WE HOPE YOU LIKED OUR SOLUTION.

Soham Korade
Pranav Agrawal
Harshit Aggarwal
Bhav Beri
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