UNVEILING OPPORTUNITIES:
FORECASTING LINKEDIN JOB POSTING VIEWS

BY: JJ PARK

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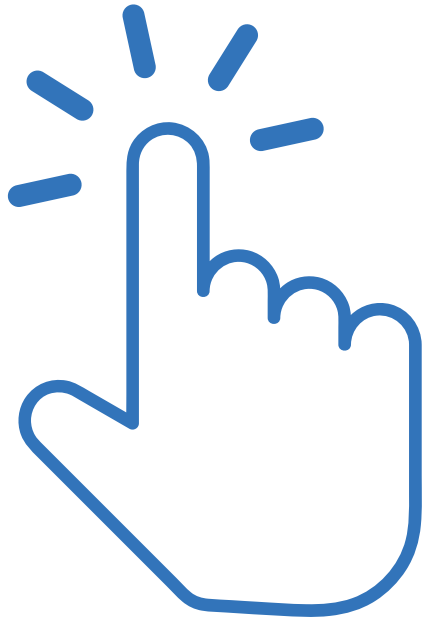
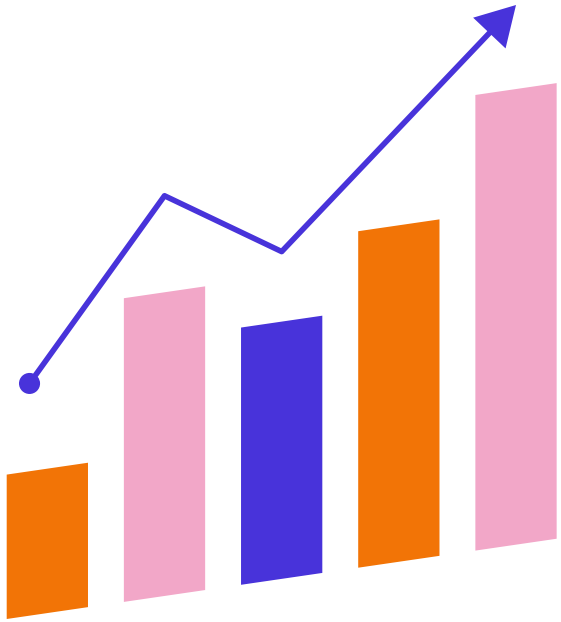
INTRODUCTION

WHAT MAKES YOU CLICK ON A JOB POSTING?



AREAS OF INTEREST

THE MAIN FOCUS IS TO GAIN INSIGHTS INTO THE JOB TRENDS AND FACTORS INFLUENCING NUMBER OF VIEWS IN THE JOB POSTINGS



IMPACT

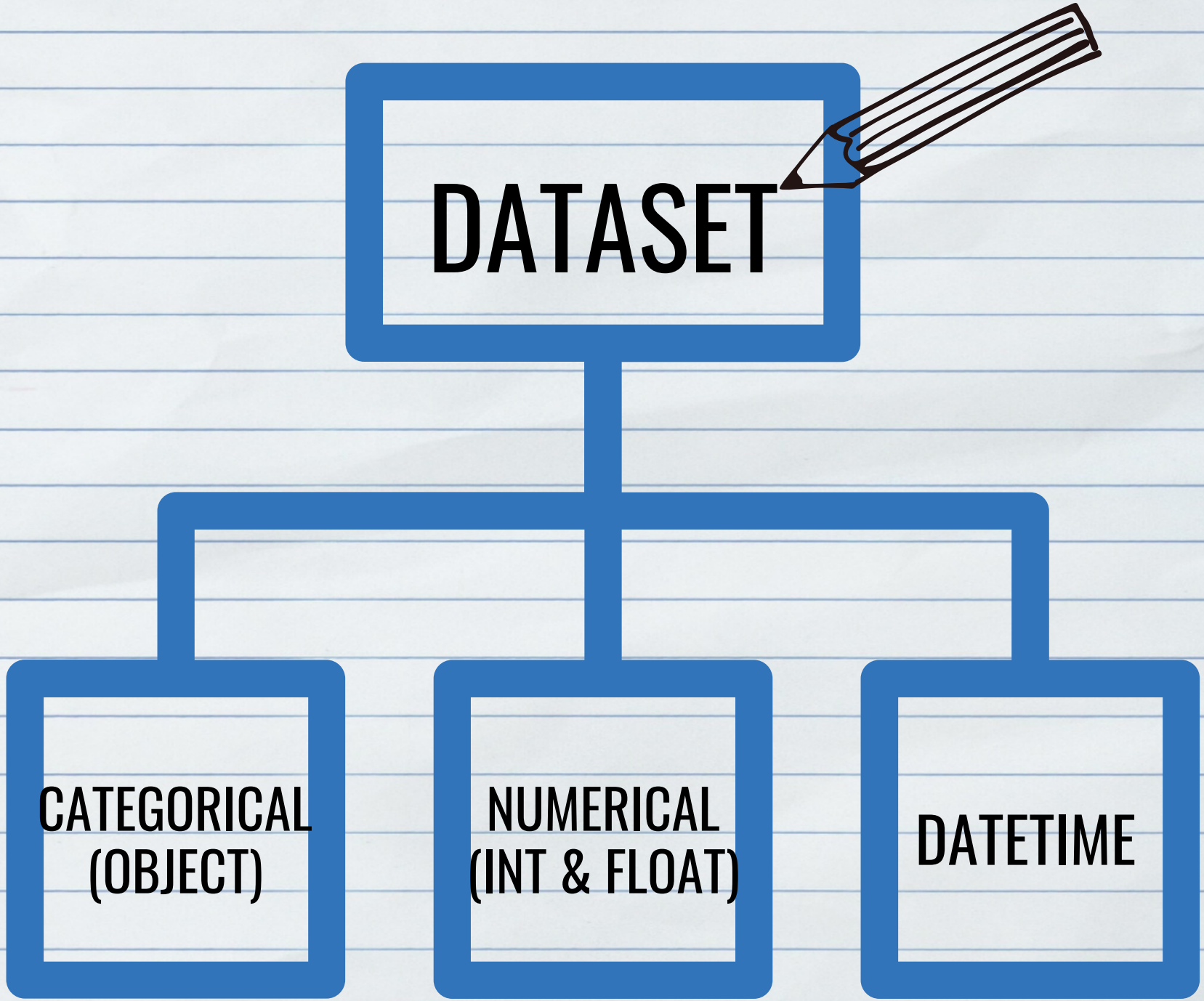
THE ANALYSIS OF THE JOB POSTING DATASET CAN ADD SIGNIFICANT VALUES TO:

- **COMPANIES AND RECRUITERS**
- **JOB APPLICANTS**

DATA SCIENCE SOLUTIONS:

THE PROPOSED DATA SCIENCE SOLUTION INVOLVES:

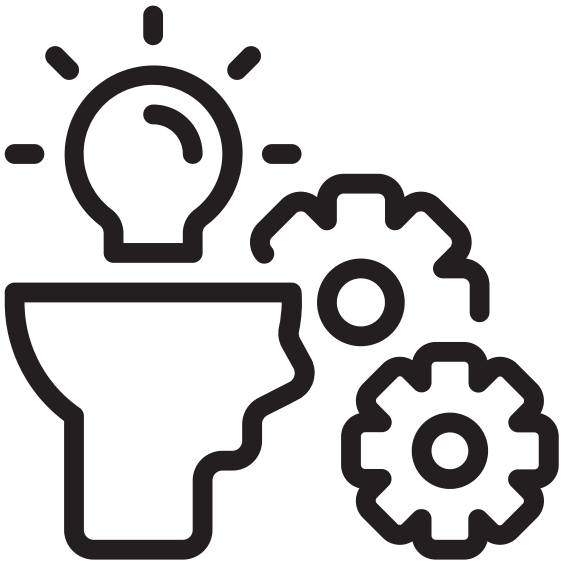
1. EXPLORATORY DATA ANALYSIS
2. FEATURE ENGINEERING
3. PREDICTIVE MODELING


DATASET
CATEGORICAL (OBJECT)
NUMERICAL (INT & FLOAT)
DATETIME

DATA PROCESSING

SOME OF THE PROCEDURES INCLUDE:

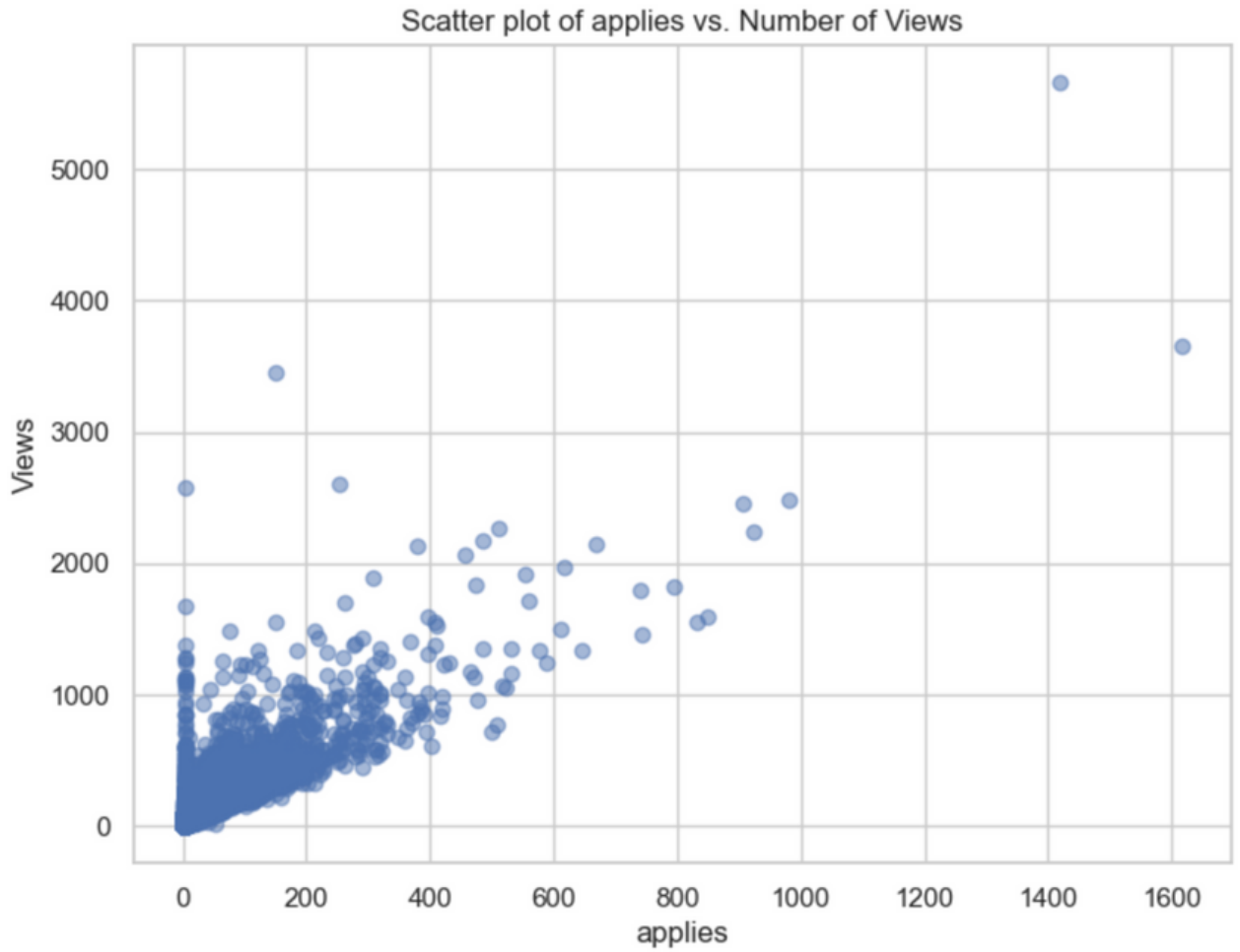
- IMPUTING NULL VALUES
- REMOVING IRRELEVANT VARIABLES
- FEATURE ENGINEERING



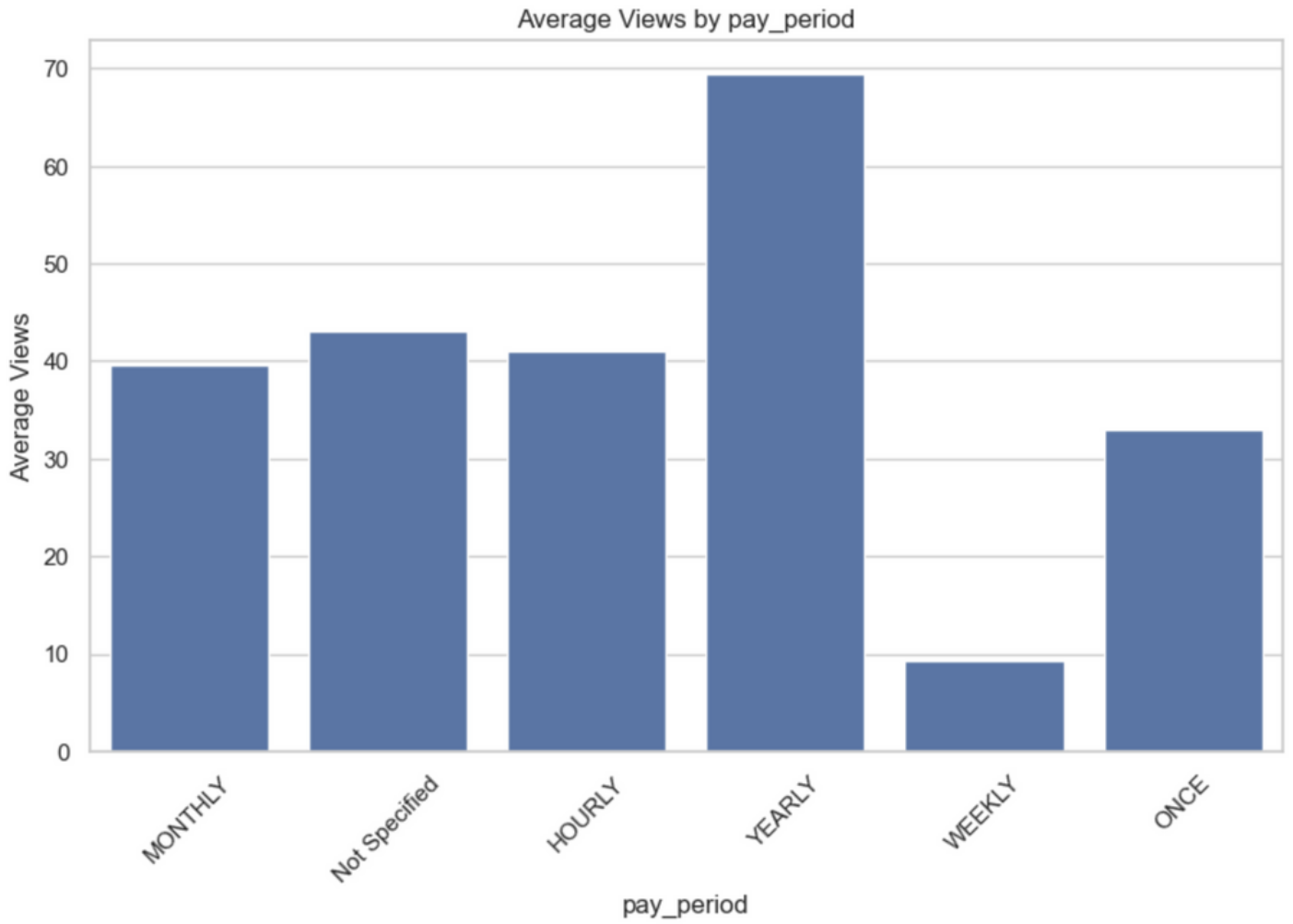
EXPLORATORY DATA ANALYSIS

THE PLOTS SHOWN IN THE SUBSEQUENT SLIDES DISPLAY RELATIONSHIP BETWEEN DIFFERENT FEATURES WITH THE TARGET VARIABLE, **VIEWS**

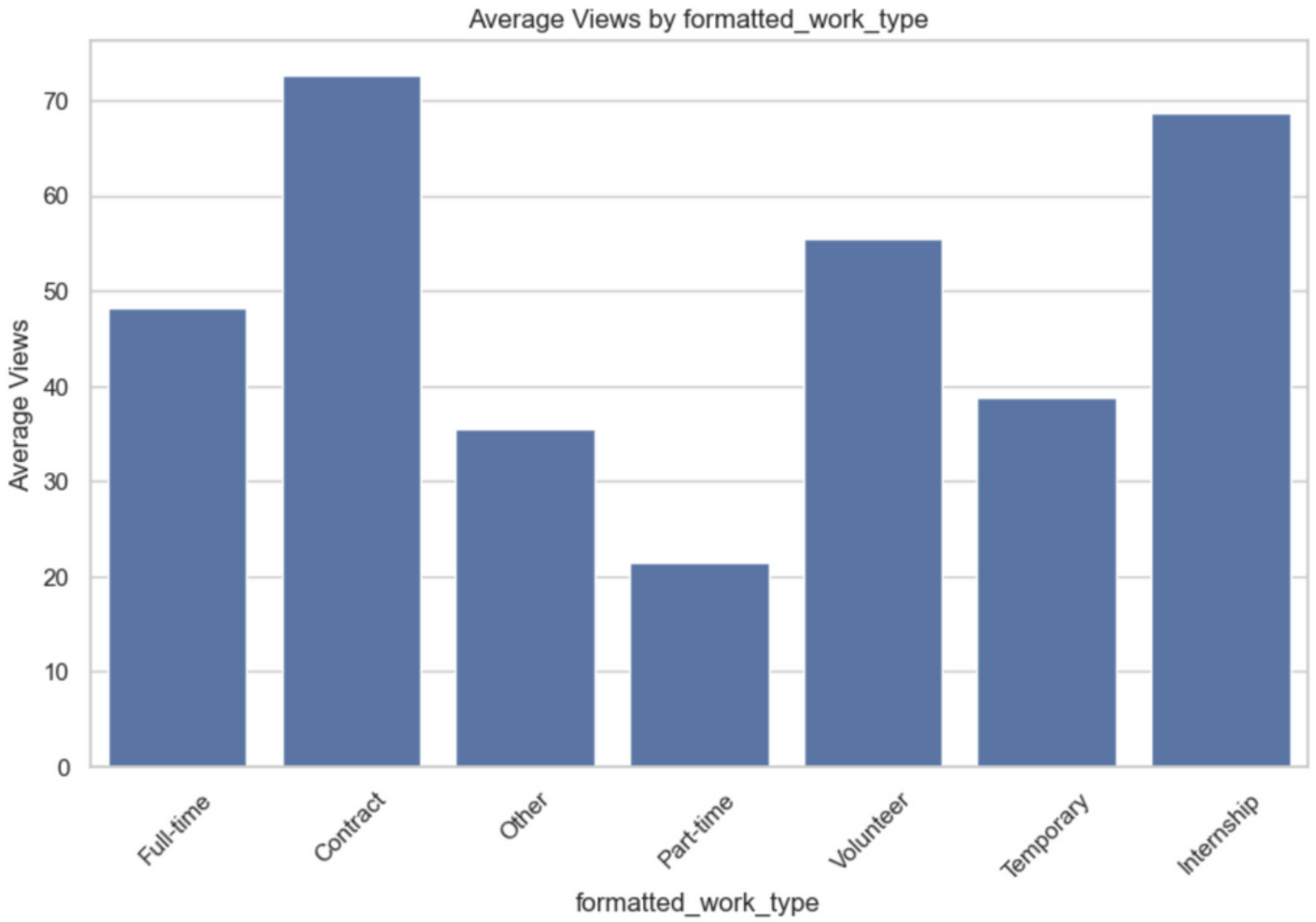
VIEWS AND APPLIED



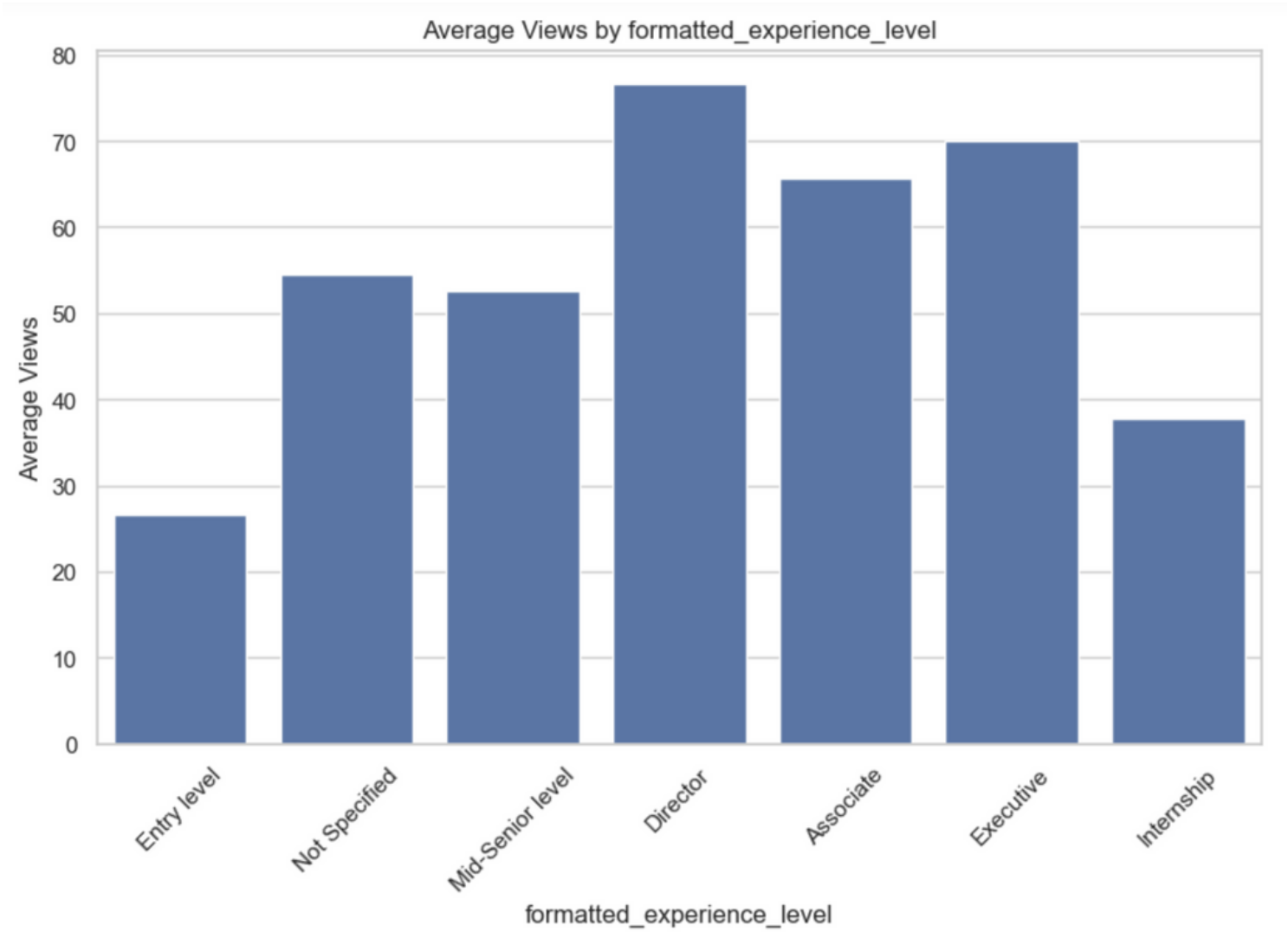
VIEWS AND PAY PERIOD



VIEWS AND WORK TYPE



VIEWS AND EXPERIENCE LEVEL



BASELINE MODELING

MODELS:

- LINEAR REGRESSION
- RANDOM FOREST

EVALUATION METRIC

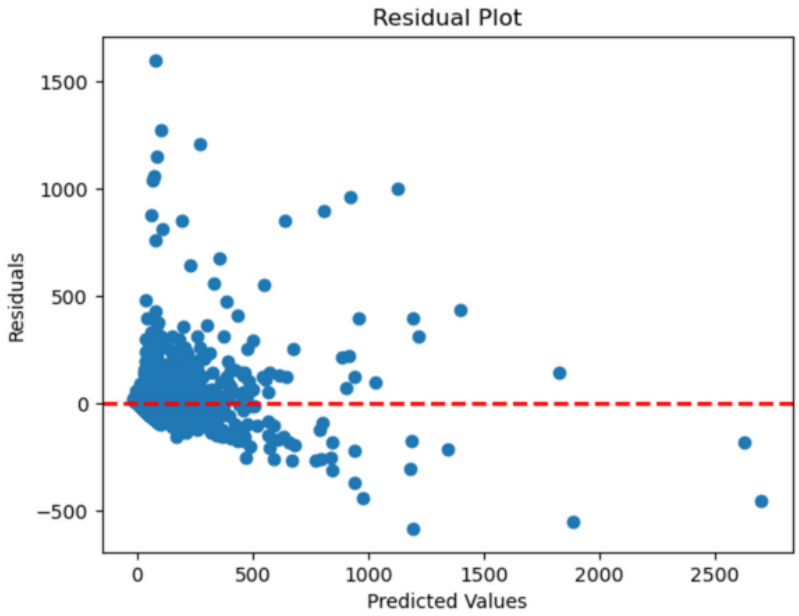
LINEAR REGRESSION:

```
MAPE TRAIN: 3.097998556370336
MAPE TEST: 3.1696269026661237
R-squared (R^2) value: 0.736185127123336 3
R-squared (R^2) value: 0.713345265966544 1
```

RANDOM FOREST:

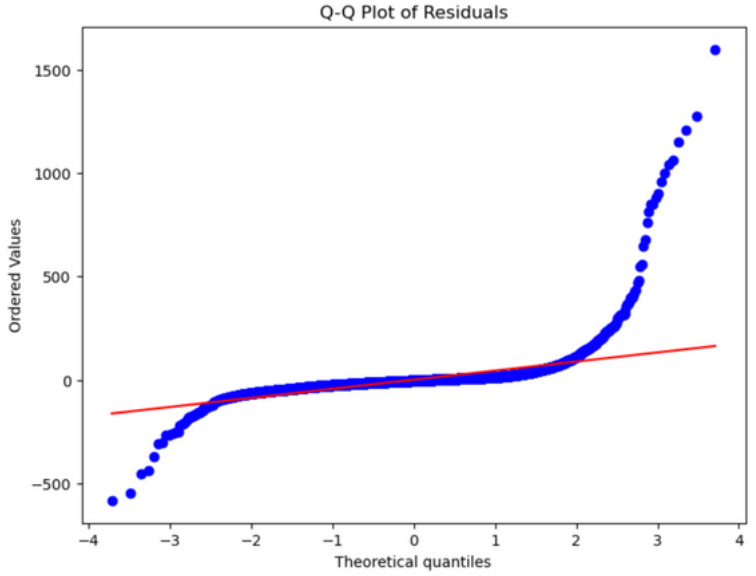
```
Mean Absolute Percentage Error (MAPE) for TRAIN set: 0.6270444267531536
Mean Absolute Percentage Error (MAPE) for TEST set: 1.6016266384014395
R-squared (R^2) value TRAIN: 0.9661541437056351
R-squared (R^2) value TEST: 0.7592597677281674
```

LINEAR REGRESSION:



HETEROSCEDASTICITY

EXCESS KURTOSIS



SPRINT 3?

ADVANCED MODELING:

- FINE-TUNE HYPERPARAMETERS
- RIDGE AND LASSO REGRESSION
- SUPPORT VECTOR MACHINES (SVM)
- NATURAL LANGUAGE PROCESSING (NLP)
- NEURAL NETWORKS

NEXT ➡

SPRINT 3?

RETOOLING:

- ORGANIZE THE NOTEBOOK AND DATASET
- CREATE A GUIDELINE FOR NAVIGATION PURPOSES
- DEVELOP VIEWS PREDICTION MODEL
- CONDUCT EXTERNAL RESEARCH

NEXT

CONCLUSION

- BUILDING A PREDICTIVE MODEL FOR JOB POSTING VIEWS ADDS SIGNIFICANT VALUES TO THE JOB INDUSTRY:
- COMPANIES CAN HIGHLIGHT KEY FEATURES IN THE JOB POSTING TO BOOST THE NUMBER OF VIEWS
- JOB APPLICANTS CAN ASSESS THE JOB TRENDS AND PRIORITIZE ON POPULAR JOB FEATURES

THANK YOU FOR LISTENING!