

# TV Ratings Prediction with Time Weighting Based Regression

Master Thesis Defense

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# Agenda

- 1 Thesis Goal: Solve the Problem of TV Ratings Prediction
- 2 Solution: Time Weighting Based Regression (TWR)
- 3 Related Work
- 4 Experiments
- 5 Conclusion

Thesis Goal: Solve the Problem of TV Ratings  
Prediction

# Thesis Goal: Solve the Problem of TV Ratings Prediction

Solution: Time Weighting Based Regression (TWR)

# What is TWR?

# Why TWR?

# How does TWR work?



## Related Work

# Experiments

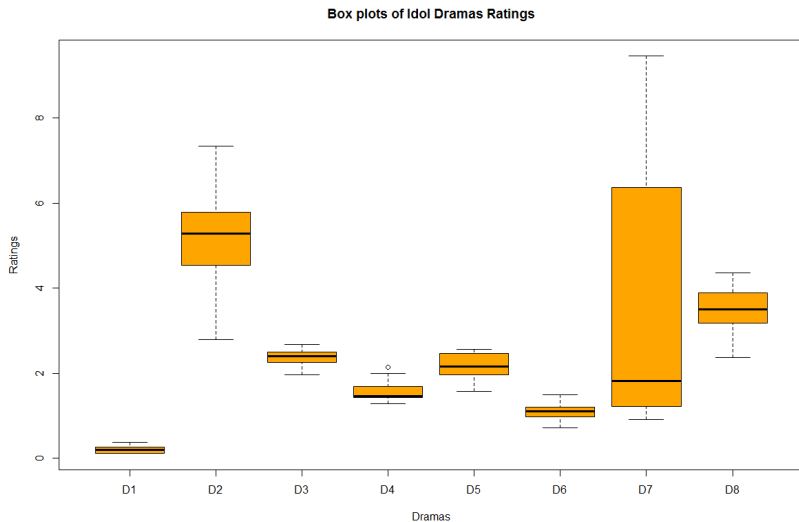


Figure 1: Box plots of ratings

## Conclusion

## Code example

```
if (weight_type == 'equal') {  
  # this is known as bagging  
  case_weights <- rep(1 / num_cases, num_cases)  
} else if (weight_type == 'linear') {  
  case_weights <- seq(1, num_cases)  
} else if (weight_type == 'exp') {  
  case_weights <- exp(1:num_cases)  
} else if (weight_type == 'exp3') {  
  alpha <- 3  
  case_weights <- (exp(1)^alpha)^(1:num_cases)  
} else {  
  # decide weight type automatically via validation error  
}
```