Welcome to

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The Session Will Begin Shortly

START

Statistics in R with Tidyverse

Session 12: Storytelling with Data

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Wrap-Up

- Journey through ModernDive (Second Edition)

- Explored key steps in the data science pipeline

- Applied tools and techniques for data wrangling, visualization, and modeling using computation and visualization as the drivers

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Review: Data Science with `tidyverse`

- Learned to visualize data using `ggplot2`

- Mastered data wrangling with `dplyr`

- Understood the concept of "tidy" data with `tidyr`

- Imported and cleaned real-world data

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Review: Statistical Modeling with `moderndive`

- Fitted simple linear regression models

- Expanded to multiple regression models with more than one predictor

- Interpreted coefficients and effects of predictors on the response

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Review: Statistical Inference with `infer`

• Understood the role of sampling variability and sample size

• Constructed confidence intervals using bootstrapping and theory-based approaches

• Conducted hypothesis testing using theory-based and permutation methods

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Final Thoughts: Thinking with Data

- Data-driven mindset

  - Asking the right questions

  - Approaching problems methodically

- Analytical thinking

  - Breaking down complex issues

  - Identifying patterns and trends

- Critical thinking

  - Evaluating sources

  - Checking validity of conclusions

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Looking Forward: Telling Your Story with Data

- Use your new skills to tell data-driven stories

- Stay curious and continue to explore different data science workflows

- Keep refining your techniques and learning new tools

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Final Q & A

STOP