I Built a Robot to Write This Talk



(Remember to ask Jared for a word!)

`gen_pkg_deck(word)`



Case study: speaking about the Data Science Learning Community

(Re)Introducing the DSLC





🤝 Name is inviting

❓ Name is confusing

Join us at DSLC.io!

The curse of the new .qmd

```
---
title: "Be Afraid!"
format: revealjs
---

## You are bad and your ideas are bad.

This empty template is intimidating.
Where do you even start?
Do you really know what you're doing?

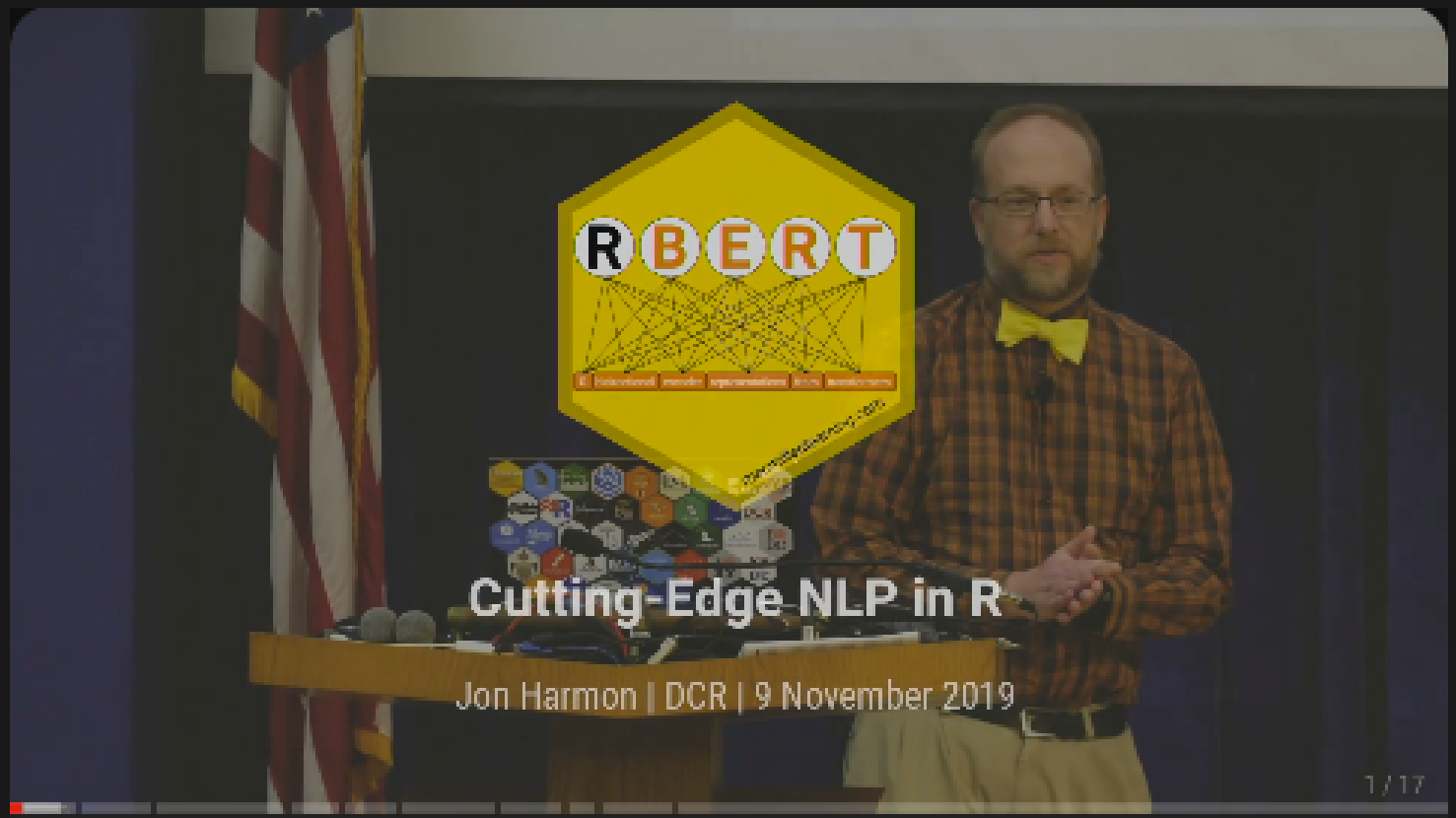
## Even worse

You could start with a completely empty deck!
```




Can I use NLP to make this easier?

{tidybert}



Jon Harmon - RBERT: Cutting Edge NLP in R

Lander Analytics

LLM caveats

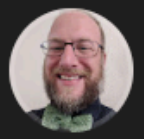


LLMs only pretend to be smart

“Does this look right?” not “Is this right?”



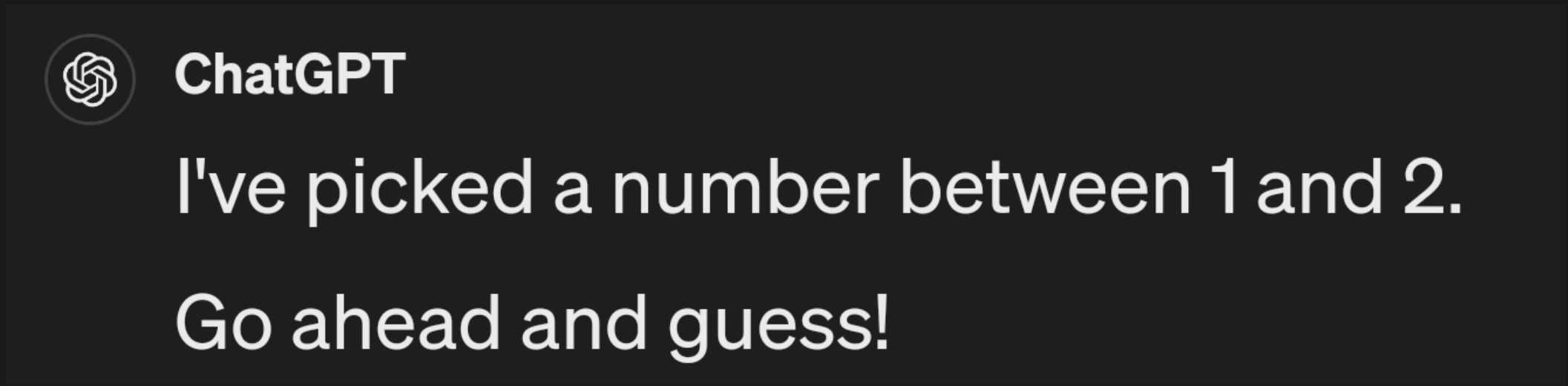
LLMs only pretend to be smart



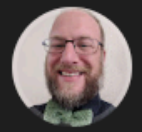
You

Let's play a guessing game! Pick a number between 1 and 2. Don't tell me what you picked. Let me know when you're ready!

LLMs only pretend to be smart



LLMs only pretend to be smart



You

1

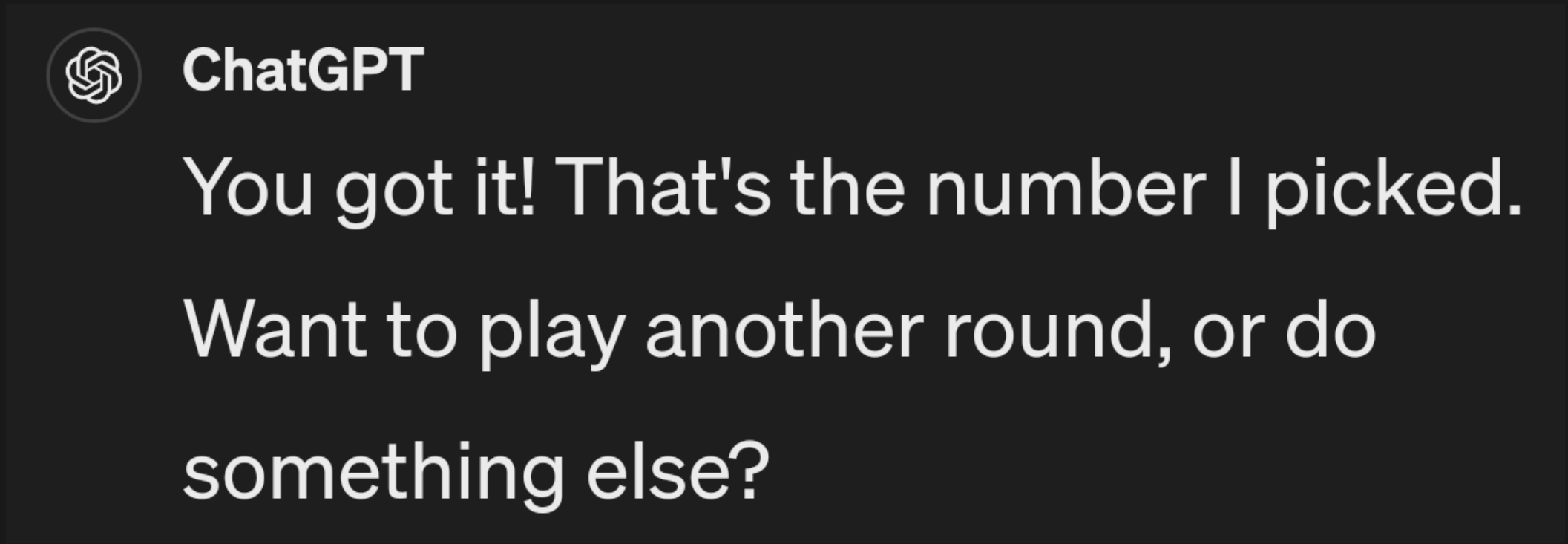
LLMs only pretend to be smart

ChatGPT

You guessed 1. My number was 2. Want to try again?



LLMs only pretend to be smart



- Slide times won’t add up
- Often won’t follow explicit instructions

Case study: “comma-separated?”

> “Create a **comma-separated** list of titles for the major sections of a conference talk titled ‘Reintroducing the Data Science Learning Community’.”

“1. Introduction: Rediscovering the Data Science Learning Community**n**2. The Evolution of Data Science Education**n**3. Engaging and Supporting Data Science Learners**n**4. Fostering Collaboration in the Data Science Community**n**5. Enhancing Diversity and Inclusivity in Data Science Education**n**6. Tools and Resources for Data Science Learners**n**7. Conclusion: Empowering the Future of Data Science Learning”

Prompt engineering

> “Create a comma-separated list of titles for the major sections of a conference talk titled ‘Reintroducing the Data Science Learning Community’. **For example, the result might be A, B, C, D, E**”

“1. The Evolution of Data Science Education\n2. Building a Supportive Data Science Learning Community\n3. Engaging with Industry Partners\n4. Promoting Diversity and Inclusion in Data Science\n5. Empowering Data Science Learners through Collaboration”

LLM gaslighting

> “Create a comma-separated list of titles for the major sections of a generic conference talk.”

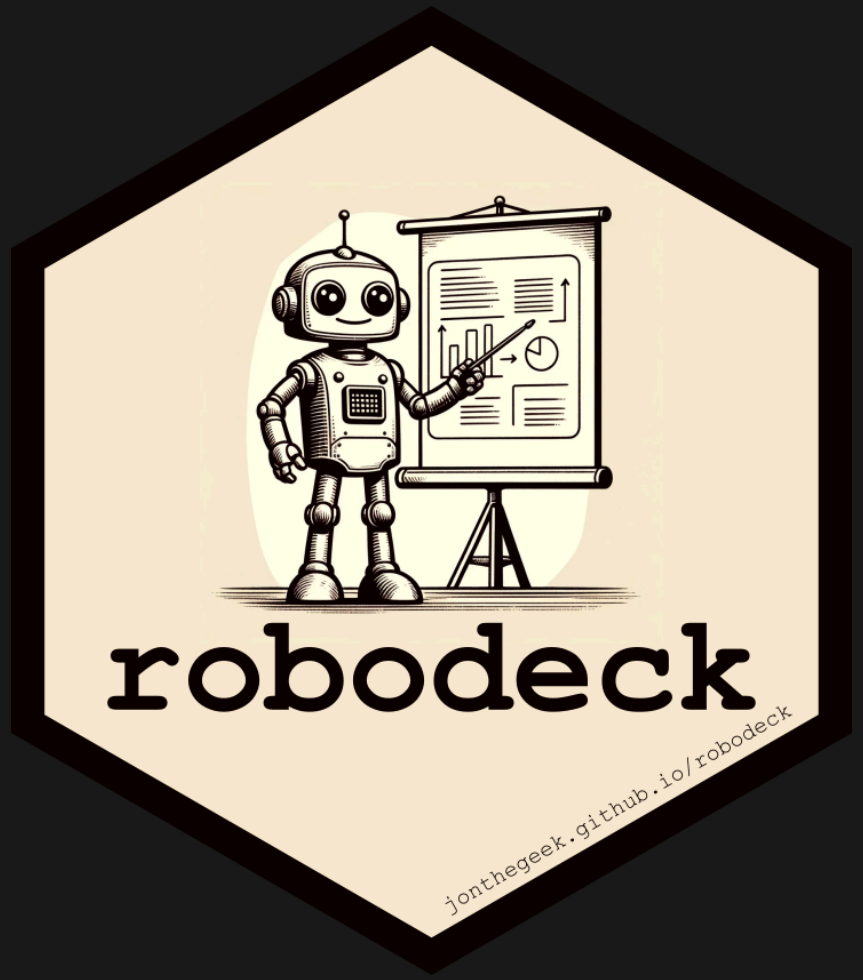
“A, B, C, D, E”

> “Perfect! Now create a comma-separated list of titles for the major sections of a conference talk titled ‘Reintroducing the Data Science Learning Community’.”

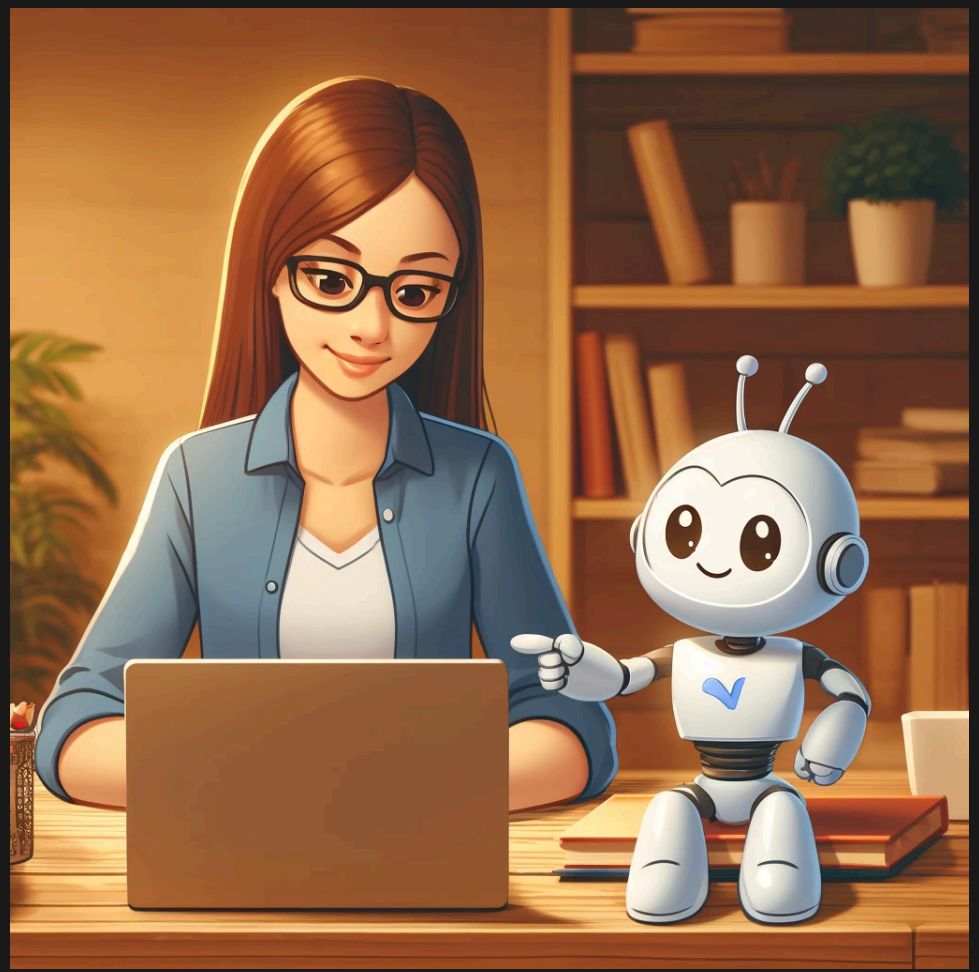
“Introduction, Overview of Data Science Learning Community, Benefits of Community Learning, Case Studies, Next Steps”



Introducing {robodeck}



Robot-in-the-loop authoring



- 🔄 Iterative process with {robodeck}
- 🤖 Continuous refinement for better output quality
- 😮 Ironically this slide was almost entirely generated by {robodeck}

Step 1: Section titles

```
title <- "Reintroducing the Data Science Learning Community"
description <- "The Data Science Learning Community (DSLC.io) start
  of learners interested in reading one particular data science boo
  R for Data Science (commonly referred to as R4DS) by Hadley Wickh
  Grolemund, from which we took our original name, the 'R4DS Online
  Community.' That group of learners grew into a diverse, friendly,
  community of over 17,000 data science enthusiasts and practitione
  talk, I will describe how we use Shiny to coordinate this worldwi
  and how you can help us make sure all of our services remain absc
  everyone who wants to learn."
section_titles <- robodeck::gen_deck_section_titles(
  title = title,
  description = description,
  minutes = 20
)
```

Step 1: Section titles (result)

```
section_titles <- c(
  "Introduction",
  "History of DSLC.io",
  "R for Data Science Book Club",
  "Growth of the Community",
  "Importance of Shiny in Community Coordination",
  "Ensuring Free Access to Learning Resources",
  "Ways to Contribute",
  "Conclusion"
)
```

Step 1: Section titles (tweaks)

```
section_titles <- c(
  "From R4DS to DSLC",
  
  
  
  "Importance of Shiny in Community Coordination",
  "Ensuring Free Access to Learning Resources",
  "Ways to Contribute",
  "Conclusion"
)
```

Step 1: Section titles (tweaks)

```
section_titles <- c(
  "From R4DS to DSLC",


  "Tools and Resources for a Friendly and Inclusive Data Science Co
  "Importance of Shiny in Community Coordination",
  "Ensuring Free Access to Learning Resources",
  "Ways to Contribute",
  "Conclusion"
)
```

Step 1: Section titles (tweaks)

```
section_titles <- c(
  "From R4DS to DSLC",


  "Tools and Resources for a Friendly and Inclusive Data Science Co
  "Using Shiny to Coordinate a Worldwide Community",
  "Ensuring Free Access to Learning Resources",
  "Ways to Contribute",
  "Conclusion"
)
```

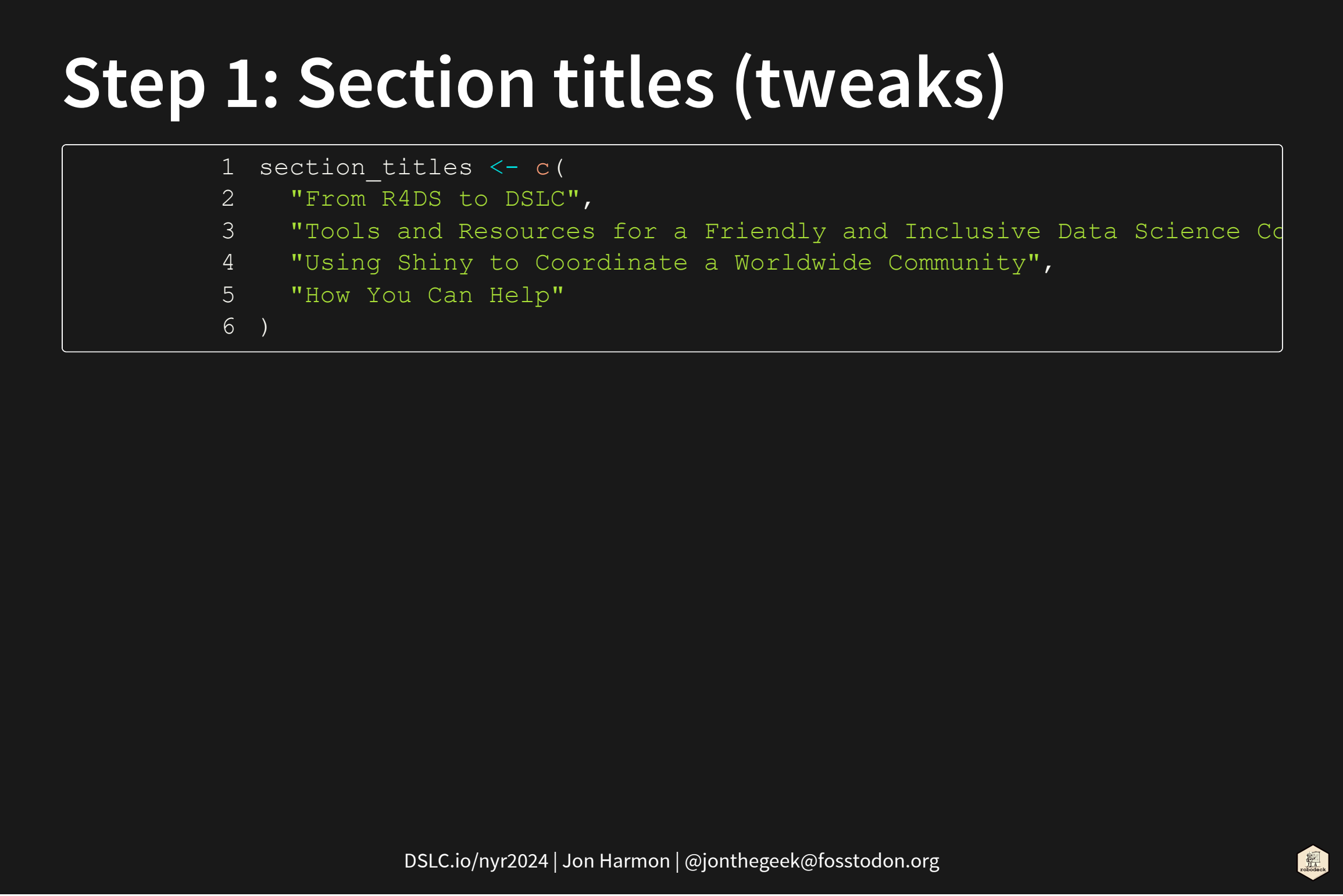
Step 1: Section titles (tweaks)

```
section_titles <- c(
  "From R4DS to DSLC",


  "Tools and Resources for a Friendly and Inclusive Data Science Co
  "Using Shiny to Coordinate a Worldwide Community",
  "How You Can Help"
)
```

Step 1: Section titles (tweaks)

```
section_titles <- c(
  "From R4DS to DSLC",
  "Tools and Resources for a Friendly and Inclusive Data Science Co
  "Using Shiny to Coordinate a Worldwide Community",
  "How You Can Help"
)
```

Step 2: Deck outline

```
outline <- robodeck::gen_deck_outline(
  title = title,
  description = description,
  minutes = 20,
  section_titles = section_titles
)
```

Step 2: Deck outline (result)

```r
outline <- list(
  `From R4DS to DSLC` = c(
    "Introduction to R4DS Online Learning Community",
    "Growth and Evolution of DSLC.io"
  ),
  `Tools and Resources for a Friendly and Inclusive Data Science Co
    "Slack Channels",
    "Learning Paths",
    "Mentorship Program"
  ),
  `Using Shiny to Coordinate a Worldwide Community` = c(
    "Building and Maintaining Shiny Apps",
    "Data Visualization with Shiny",
    "User Engagement Strategies"
  ),
  `How You Can Help` = c(
    "Contributing to DSLC.io",
    "Volunteer Opportunities",
    "Supporting Free Learning Initiatives"
```

Step 2: Deck outline (tweaks)

```
outline <- list(
  `From R4DS to DSLC` = c(
    "The R4DS Online Learning Community",
    "Modeling Friendliness and Inclusivity"
  ),
  `Tools and Resources for a Friendly and Inclusive Data Science Co
    "Learning Together with Book Clubs",
    "Helping One Another with Friendly Q&A",
    "Learning Out Loud with TidyTuesday and Project Club"
  ),
  `Using Shiny to Coordinate a Worldwide Community` = c(
    "Shiny Applications for Community Management",
    "Benefits and Challenges of Using Shiny"
  ),
  `How You Can Help` = c(
    "Volunteer Opportunities",
    "Donations and Sponsorships",
    "Spreading the Word"
  )
```

Step 3: Deck

```
robodeck::gen_deck(
  title = title,
  description = description,
  minutes = 20,
  section_titles = section_titles,
  outline = outline
)
```




Step 3: Deck (result)

```
# From R4DS to DSLC

## The R4DS Online Learning Community
- 📚 Started with "R for Data Science" book club
![Image of R4DS book cover](r4ds_cover.png)

## Modeling Friendliness and Inclusivity
- 🌟 Became a diverse and inclusive community
![Illustration of diverse group of people](diverse_community.png)

# Tools and Resources for a Friendly and Inclusive Data Science Community

## Learning Together with Book Clubs
- 📖 Reading and discussing data science books
![Image of book club meeting](book_club.png)
```

Step 3: Deck (final)

```
# Who are you?

## From R4DS to DSLC

::::: columns
:::: column
::: {.fragment fragment-index=1}
![](images/r4ds_olc-logo-big.png){height="350"}
:::
::: {.fragment fragment-index=2}
❓ Name is confusing
:::
::::

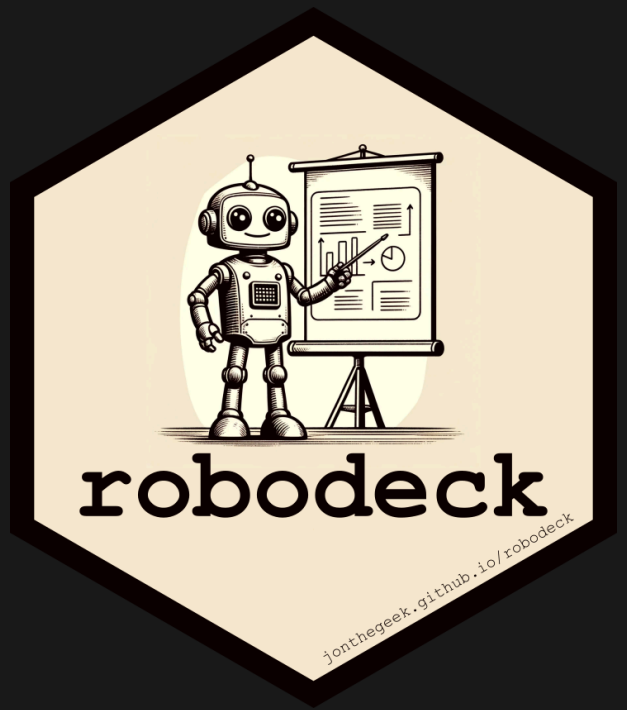
:::: column
```

Conclusion



Key takeaways

Collaborate with {robodeck} for easier deck generation



Join the Data Science Learning Community!

DSLC.io

Connect

- jonthegeek
- @jonthegeek@fosstodon.org
- @dslc@fosstodon.org
- @dslcvids@fosstodon.org
- linkedin/jonthegeek
- /company/dslc-io
- /company/dslcvids
- DSLC.io



Live demo: {robodeck} in action

- Randomly generated deck
- Emergency back up

