

Accelerometry- and Temperature-Based Algorithms to Assess Sleep Habits Among Danish Children and Adolescents

PhD Defence

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Hello, There

This presentation will show you examples of what you can do with Quarto and [Reveal.js](#), including:

- Presenting code and LaTeX equations
- Including computations in slide output
- Image, video, and iframe backgrounds
- Fancy transitions and animations
- Printing to PDF

...and much more

Big text

Speaker notes go here. Speaker notes go here. Speaker notes go here. Speaker notes go here. Speaker notes go here. Speaker notes go here.

Big Text

Pretty Code

- Over 20 syntax highlighting themes available
- Default theme optimized for accessibility

```
# Define a server for the Shiny app
function(input, output) {

  # Fill in the spot we created for a plot
  output$phonePlot <- renderPlot({
    # Render a barplot
  })
}
```

Learn more: [Syntax Highlighting](#)

Code Animations

- Over 20 syntax highlighting themes available
- Default theme optimized for accessibility

```
# Define a server for the Shiny app
function(input, output) {

  # Fill in the spot we created for a plot
  output$phonePlot <- renderPlot({
    # Render a barplot
    barplot(WorldPhones[,input$region]*1000,
            main=input$region,
            ylab="Number of Telephones",
            xlab="Year")
  })
}
```

Learn more: [Code Animations](#)

Line Highlighting

- Highlight specific lines for emphasis
- Incrementally highlight additional lines

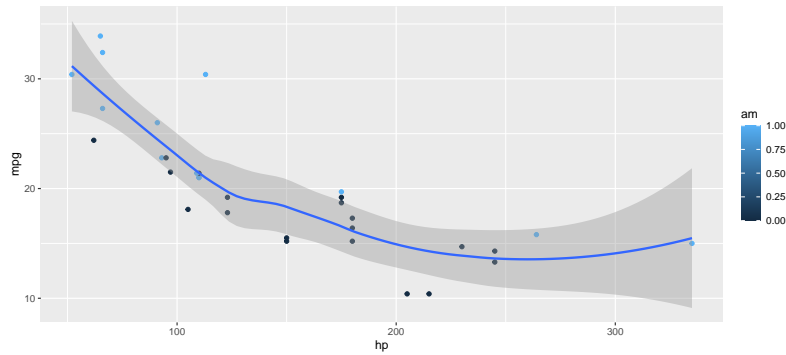
```
1 import numpy as np
2 import matplotlib.pyplot as plt
3 r = np.arange(0, 2, 0.01)
4 theta = 2 * np.pi * r
5 fig, ax = plt.subplots(subplot_kw={'projection': 'polar'})
6 ax.plot(theta, r)
7 ax.set_rticks([0.5, 1, 1.5, 2])
8 ax.grid(True)
9 plt.show()
```

Learn more: [Line Highlighting](#)

Executable Code

```
library(ggplot2)
ggplot(mtcars, aes(hp, mpg, color = am)) +
  geom_point() +
  geom_smooth(formula = y ~ x, method = "loess")
```

Warning: The following aesthetics were dropped during statistical transformation: colour
i This can happen when ggplot fails to infer the correct grouping structure in the data.
i Did you forget to specify a `group` aesthetic or to convert a numerical variable into a factor?



Learn more: [Executable Code](#)

LaTeX Equations

[MathJax](#) rendering of equations to HTML

```
\begin{gather*}
a_1=b_1+c_1\\
a_2=b_2+c_2-d_2+e_2
\end{gather*}
\begin{align}
a_{11}&=b_{11}&
a_{12}&=b_{12}\\
a_{21}&=b_{21}&
a_{22}&=b_{22}+c_{22}
\end{align}
```

$$a_1 = b_1 + c_1$$

$$a_2 = b_2 + c_2 - d_2 + e_2$$

$$a_{11} = b_{11} \qquad a_{12} = b_{12} \qquad (1)$$

$$a_{21} = b_{21} \qquad a_{22} = b_{22} + c_{22} \qquad (2)$$

Learn more: [LaTeX Equations](#)

Column Layout

Arrange content into columns of varying widths:

Motor Trend Car Road Tests

The data was extracted from the 1974 Motor Trend US magazine, and comprises fuel consumption and 10 aspects of automobile design and performance for 32 automobiles.

```
knitr::kable(head(mtcars)[,c("mpg", "cyl", "disp", "hp", "wt")])
```

	mpg	cyl	disp	hp	wt
Mazda RX4	21.0	6	160	110	2.620
Mazda RX4 Wag	21.0	6	160	110	2.875
Datsun 710	22.8	4	108	93	2.320
Hornet 4 Drive	21.4	6	258	110	3.215
Hornet Sportabout	18.7	8	360	175	3.440
Valiant	18.1	6	225	105	3.460

Learn more: [Multiple Columns](#)

Incremental Lists

Lists can optionally be displayed incrementally:

- First item
- Second item
- Third item

. . .

Insert pauses to make other types of content display incrementally.

Learn more: [Incremental Lists](#)

Fragments

Incremental text display and animation with fragments:

Fade in

Slide up while fading in

Slide left while fading in

Fade in then semi out

. . .

Strike

Highlight red

Learn more: [Fragments](#)

Slide Backgrounds

Set the `background` attribute on a slide to change the background color (all CSS color formats are supported).

Different background transitions are available via the `background-transition` option.

Learn more: [Slide Backgrounds](#)

Media Backgrounds

You can also use the following as a slide background:

- An image: `background-image`
- A video: `background-video`
- An iframe: `background-iframe`

Learn more: [Media Backgrounds](#)

Absolute Position

Position images or other elements at precise locations





Learn more: [Absolute Position](#)

Auto-Animate

Automatically animate matching elements across slides with Auto-Animate.

Learn more: [Auto-Animate](#)

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Automatically animate matching elements across slides with Auto-Animate.

Learn more: [Auto-Animate](#)

Slide Transitions

The next few slides will transition using the `slide` transition

Transition Description	
<code>none</code>	No transition (default, switch instantly)
<code>fade</code>	Cross fade
<code>slide</code>	Slide horizontally
<code>convex</code>	Slide at a convex angle
<code>concave</code>	Slide at a concave angle

Transition Description

zoom Scale the incoming slide so it grows in from the center of the screen.

Learn more: [Slide Transitions](#)

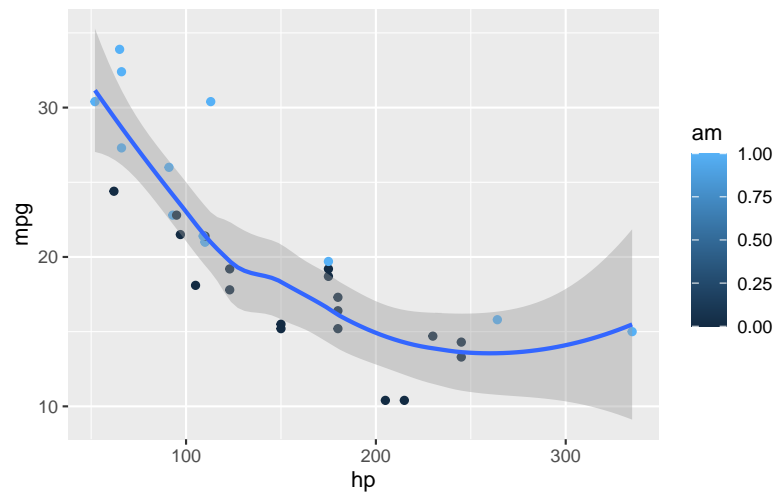
Tabsets

Plot

```
library(ggplot2)
ggplot(mtcars, aes(hp, mpg, color = am)) +
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  geom_smooth(formula = y ~ x, method = "loess")
```

Warning: The following aesthetics were dropped during statistical transformation: colour

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- i Did you forget to specify a `group` aesthetic or to convert a numerical variable into a factor?



Data

```
knitr::kable(mtcars)
```

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.62	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.32	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.44	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.46	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.57	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.19	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.15	22.90	1	0	4	2
Merc 280	19.2	6	167.6	123	3.92	3.44	18.30	1	0	4	4
Merc 280C	17.8	6	167.6	123	3.92	3.44	18.90	1	0	4	4
Merc 450SE	16.4	8	275.8	180	3.07	4.07	17.40	0	0	3	3
Merc 450SL	17.3	8	275.8	180	3.07	3.73	17.60	0	0	3	3
Merc 450SLC	15.2	8	275.8	180	3.07	3.78	18.00	0	0	3	3
Cadillac Fleetwood	10.4	8	472.0	205	2.93	5.25	17.98	0	0	3	4
Lincoln Continental	10.4	8	460.0	215	3.00	5.42	17.82	0	0	3	4
Chrysler Imperial	14.7	8	440.0	230	3.23	5.34	17.42	0	0	3	4
Fiat 128	32.4	4	78.7	66	4.08	2.20	19.47	1	1	4	1

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Honda Civic	30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
Toyota Corolla	33.9	4	71.1	65	4.22	1.835	19.90	1	1	4	1
Toyota Corona	21.5	4	120.1	97	3.70	2.465	20.01	1	0	3	1
Dodge Challenger	15.5	8	318.0	150	2.76	3.520	16.87	0	0	3	2
AMC Javelin	15.2	8	304.0	150	3.15	3.435	17.30	0	0	3	2
Camaro Z28	13.3	8	350.0	245	3.73	3.840	15.41	0	0	3	4
Pontiac Firebird	19.2	8	400.0	175	3.08	3.845	17.05	0	0	3	2
Fiat X1-9	27.3	4	79.0	66	4.08	1.935	18.90	1	1	4	1
Porsche 914-2	26.0	4	120.3	91	4.43	2.140	16.70	0	1	5	2
Lotus Europa	30.4	4	95.1	113	3.77	1.513	16.90	1	1	5	2
Ford Pantera L	15.8	8	351.0	264	4.22	3.170	14.50	0	1	5	4
Ferrari Dino	19.7	6	145.0	175	3.62	2.770	15.50	0	1	5	6
Maserati Bora	15.0	8	301.0	335	3.54	3.570	14.60	0	1	5	8
Volvo 142E	21.4	4	121.0	109	4.11	2.780	18.60	1	1	4	2

Learn more: [Tabsets](#)

Preview Links

Navigate to hyperlinks without disrupting the flow of your presentation.

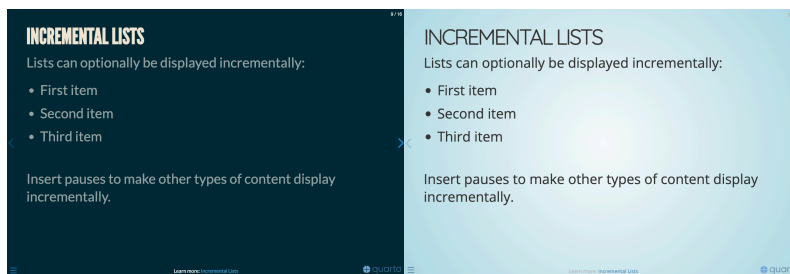
Use the `preview-links` option to open links in an iframe on top of your slides. Try clicking the link below for a demonstration:

[Matplotlib: Visualization with Python](#)

Learn more: [Preview Links](#)

Themes


10 Built-in Themes (or [create your own](#))



Learn more: [Themes](#)

Easy Navigation

Quickly jump to other parts of your presentation


 Toggle the slide menu with the menu button (bottom left of slide) to go to other slides and access presentation tools.

You can also press `m` to toggle the menu open and closed.

Learn more: [Navigation](#)

Chalkboard

Free form drawing and slide annotations

 Use the chalkboard button at the bottom left of the slide to toggle the chalkboard.

Use the notes canvas button at the bottom left of the slide to toggle drawing on top of the current slide.

You can also press **b** to toggle the chalkboard or **c** to toggle the notes canvas.

Learn more: [Chalkboard](#)

Point of View

Press **o** to toggle overview mode:



Hold down the **Alt** key (or **Ctrl** in Linux) and click on any element to zoom towards it—try it now on this slide.



Learn more: [Overview Mode](#), [Slide Zoom](#)

Speaker View

Press **s** (or use the presentation menu) to open speaker view

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Quarto Presentations
with Reveal.js

<https://quarto.org>

Upcoming, There

Layout

Reveal.js enables you to create beautiful interactive slides using HTML. This presentation will show you examples of what it can do, including:

- Presenting code and LaTeX equations
- Including computations in slide output
- Image, video, and iframe backgrounds
- Fancy transitions and animations
- Printing to PDF

Learn more: [Quarto Presentations](#)

TIME

00:01:01

09:33

Learn more: [Speaker View](#)

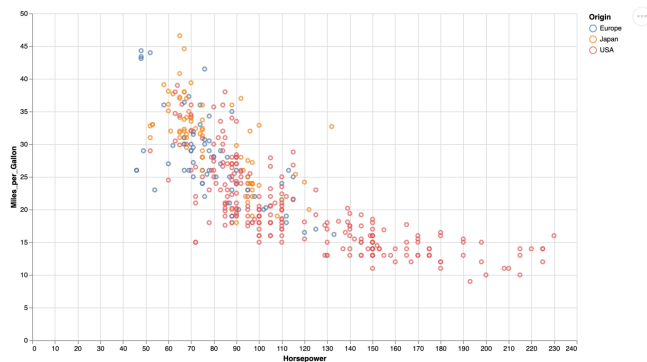
Authoring Tools

Live side-by-side preview for any notebook or text editor including Jupyter and VS Code



Miles per Gallon

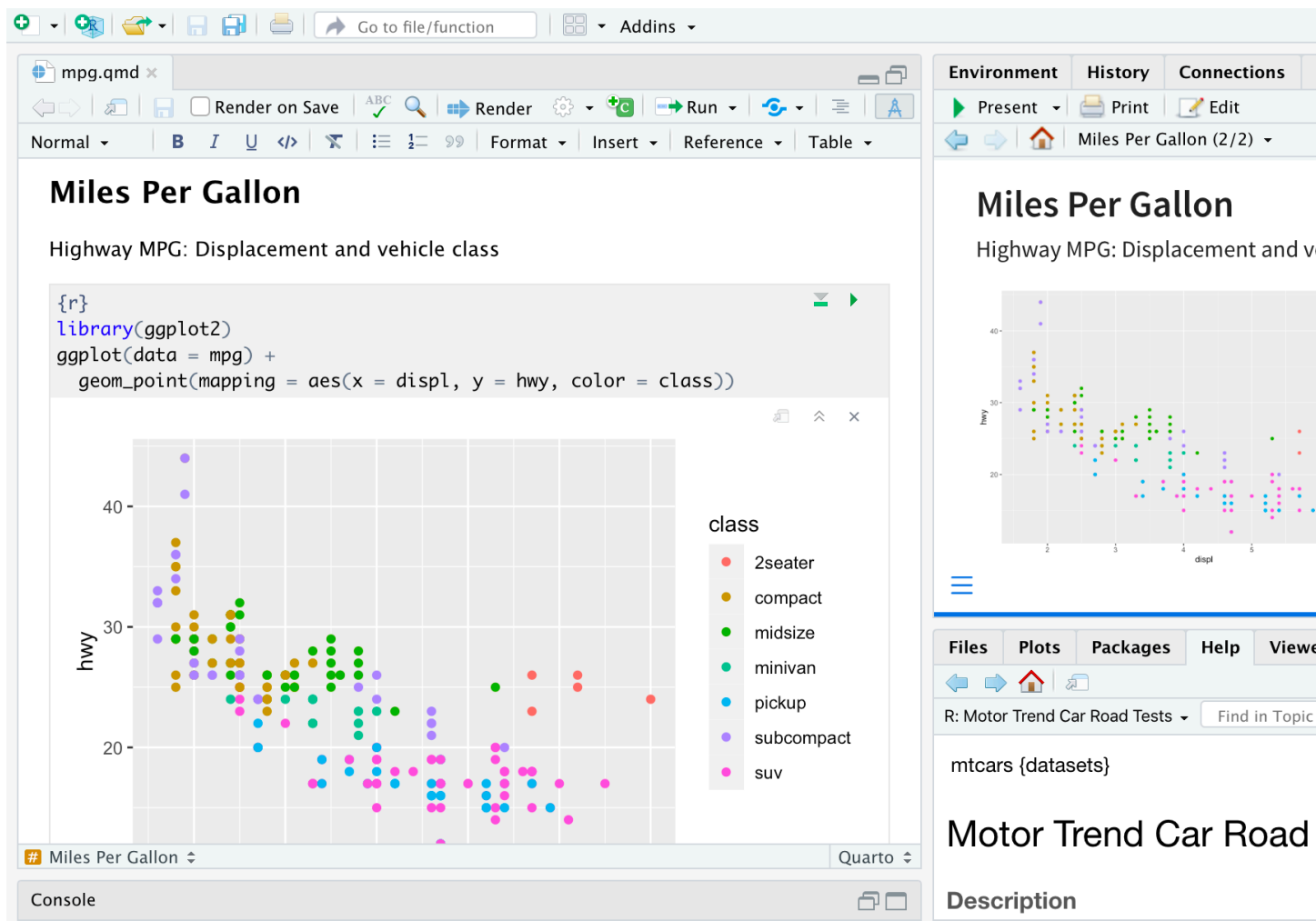
Highway MPG: Horsepower and origin



Learn more: [Jupyter](#), [VS Code](#), [Text Editors](#)

Authoring Tools

RStudio includes an integrated presentation preview pane



Learn more: [RStudio](#)

Reference and Footnotes

- Green ¹
- Brown
- Purple

Some additional commentary of more peripheral interest.

¹A footnote

And More...

- [Touch](#) optimized (presentations look great on mobile, swipe to navigate slides)
- [Footer & Logo](#) (optionally specify custom footer per-slide)
- [Auto-Slide](#) (step through slides automatically, without any user input)
- [Multiplex](#) (allows your audience to follow the slides of the presentation you are controlling on their own phone, tablet or laptop).

Learn more: [Quarto Presentations](#)