Pivotal

Pivotal Beamer Template

Example Presentation

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Outline

1. First Section
2. Second Section
3. Some Code

First Section

Buzzwords

- Big data
  1. Next generation data science
  2. Elastic deep learning
- Industry 8.0
- IoT 5.0
- More cloud → more winning

Two columns

- Considering the aspect ratio is 16:9
- It is probably a good idea to use two columns
- To avoid really long lines
- Typesetting just looks nicer than in **PowerPoint**
- And it can be versioned!

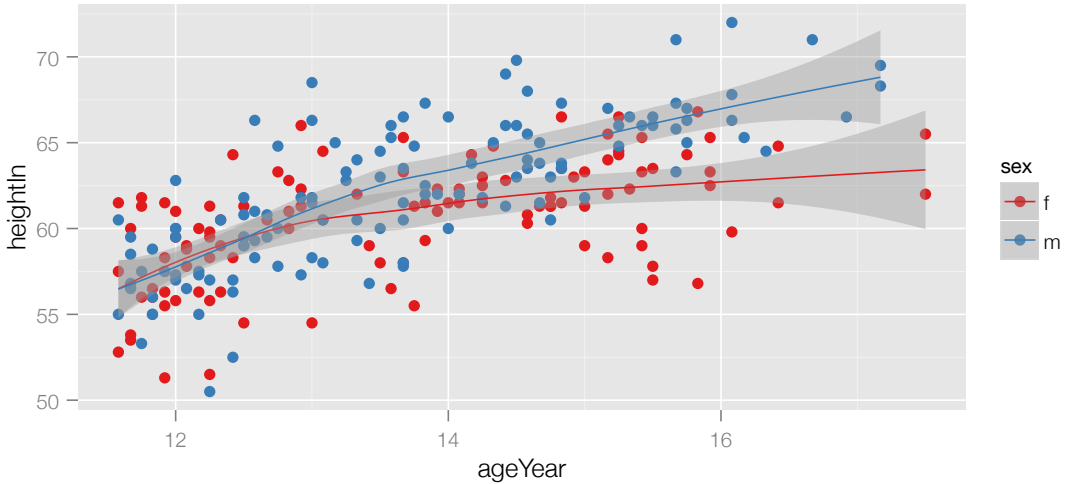
- Some other content on this side
- Big data
- More big data
- Hadoop
- GPDB
- MADlib
- $x + y = z$

Let us create a plot with `ggplot2`

- `ggplot2` is a really nice plotting library
- It can export graphics using TikZ
- Which look really nice in LaTeX

```
1  library(ggplot2)
2  library(gcookbook)
3  sps <- ggplot(heightweight, aes(x=ageYear, y=heightIn, colour=sex))
4  + geom_point()
5  + scale_colour_brewer(palette="Set1")
6  sps + geom_smooth()
```

The plot using TikZ



Second Section

A timeline using TikZ

Explaining equations (TEXample.net)

- Coriolis acceleration

$$\vec{a}_p = \vec{a}_o + \frac{{}^b d^2}{dt^2}\vec{r} + 2\vec{w}_{ib} \times \frac{{}^b d}{dt}\vec{r} + \vec{\alpha}_{ib} \times \vec{r} + \vec{w}_{ib} \times (\vec{w}_{ib} \times \vec{r})$$

Explaining equations (TEXample.net)

- Coriolis acceleration
- Transversal acceleration

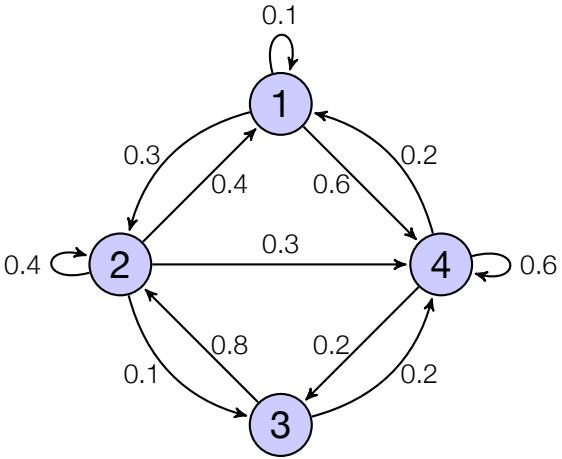
$$\vec{a}_p = \vec{a}_o + \frac{{}^b d^2}{dt^2}\vec{r} + 2\vec{w}_{ib} \times \frac{{}^b d}{dt}\vec{r} + \vec{\alpha}_{ib} \times \vec{r} + \vec{w}_{ib} \times (\vec{w}_{ib} \times \vec{r})$$

Explaining equations (TEXample.net)

- Coriolis acceleration
- Transversal acceleration
- Centripetal acceleration

$$\vec{a}_p = \vec{a}_o + \frac{{}^b d^2}{dt^2}\vec{r} + 2\vec{w}_{ib} \times \frac{{}^b d}{dt}\vec{r} + \vec{\alpha}_{ib} \times \vec{r} + \vec{w}_{ib} \times (\vec{w}_{ib} \times \vec{r})$$

A graph (TEXample.net)



Some Code

Python

- Pygments via `minted` has syntax highlighting for all major languages

```
1  # List comprehensions
2  num = [1, 4, -5, 10, -7, 2, 3, -1]
3  filtered_and_squared = [ x**2 for x in num if x > 0]
4  print filtered_and_squared
5
6  # Generators
7  num = [1, 4, -5, 10, -7, 2, 3, -1]
8  filtered_and_squared = ( x**2 for x in num if x > 0 )
9  print filtered_and_squared
10
11 for item in filtered_and_squared:
12     print item
```

New dplyr package

```
1  library(dplyr)
2  # Built in data frame
3  head(hflights)
4
5  # Coerce to data table
6  hflights_dt <- tbl_dt(hflights)
7
8  # Caches data in local SQLite db
9  hflights_db1 <- tbl(hflights_sqlite(), "hflights")
10
11 # Caches data in local postgres db
12 hflights_db2 <- tbl(hflights_postgres(), "hflights")
13
14 carriers_df  <- group_by(hflights, UniqueCarrier)
15 carriers_dt  <- group_by(hflights_dt, UniqueCarrier)
16 carriers_db1 <- group_by(hflights_db1, UniqueCarrier)
17 carriers_db2 <- group_by(hflights_db2, UniqueCarrier)
```

SQL

```
select public.diabetes.diabetes,
    madlib.logregr_predict( array[1, times_pregnant,
            plasma,
            diastolic_blood_pressure,
            triceps_skin_fold_thickness,
            serum_insulin,
            bmi,
            diabetes_pedigree,
            age],
        public.diabetes_log_reg_ronert.coef
        )::integer as predict
from public.diabetes, public.diabetes_log_reg_ronert limit 100;
```