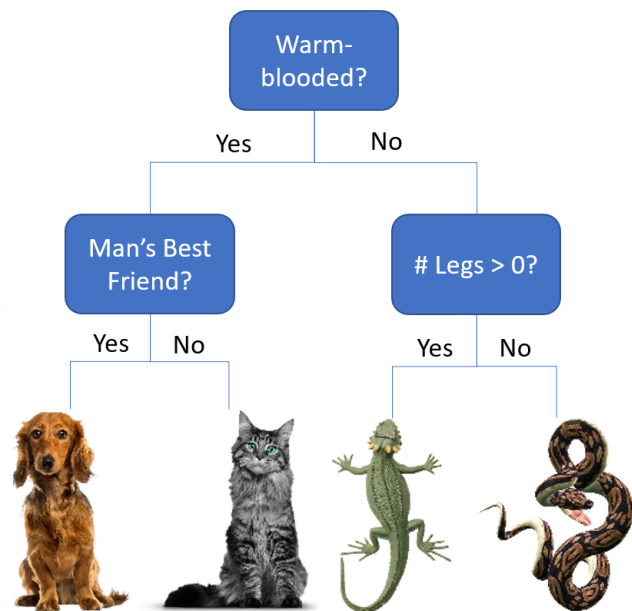


FROM EXCEL TO MACHINE LEARNING

A TRANSFORMATION



**YOUR BASIC EXCEL SKILLS WILL
UNLOCK ADVANCED ANALYTICS**

Dave
ON DATA

THE EXCEL TO ML TRANSFORMATION

Step 1 - Your basic Excel skills make learning R programming fun and easy with the self-paced online course "R Programming Made Easy"

Course Introduction

- ▶ Welcome(19:37)
- ▶ The Data(10:35)

What is R and RStudio?

- ▶ A Brief History of R(7:06)
- ▶ Excel and RStudio(13:46)
- ▶ Windows Installation(10:02)
- ▶ Mac Installation(12:07)
- ▶ Exercise #1 - The R and RStudio Basics(6:42)

It's All About the Objects

- ▶ A World of Objects(11:02)
- ▶ First There Were Tables(14:32)
- ▶ Exercise #2 - Basic Tables(9:05)
- ▶ Then There Were Vectors(9:04)
- ▶ Vectors Have Types(22:12)
- ▶ Math With Vectors(9:02)
- ▶ Exercise #3 - Fun With Vectors(14:05)

Data Frame Filtering

- ▶ Filtering With Logic(21:08)
- ▶ Filtering the R Way(9:42)
- ▶ Exercise #4 - More Tables(14:06)

Hands-on Lab #1 - Titanic First Look

- ▶ Lab Instructions
- ▶ Lab Walkthrough(31:51)

Throw in Some Functions

- ▶ Missing Data(3:21)
- ▶ Common Stats Functions(11:55)
- ▶ The Summary Function(7:03)
- ▶ The data.frame Function(7:52)
- ▶ The cbind and rbind Functions(11:51)
- ▶ The Aggregate Function(12:47)
- ▶ Exercise #5 - Some Functions(16:24)

Hands-on Lab #2 - Working Titanic Data

- ▶ Lab Instructions
- ▶ Lab Walkthrough(33:52)

Pivoting Data With dplyr

- ▶ Introducing dplyr(2:50)
- ▶ Tibbles(4:16)
- ▶ Mutating Data(12:05)
- ▶ Selecting and Filtering Data(10:18)
- ▶ Exercise #6 - Basic dplyr(15:26)
- ▶ Grouping and Summarizing Data(15:11)
- ▶ Joining Data(19:39)
- ▶ Arranging Data(3:18)
- ▶ Exercise #7 - More dplyr(20:16)

Hands-on Lab #3 - Pivoting Titanic Data

- ▶ Lab Instructions(6:19)
- ▶ Lab Walkthrough(30:38)

Visualizing Data With ggplot2

- ▶ Introducing ggplot2(3:46)
- ▶ Boxplots(12:18)
- ▶ Histograms(10:34)
- ▶ Bar Charts(8:38)
- ▶ Scatter Plots(7:00)
- ▶ Exercise #8 - ggplot2(18:55)

Hands-on Lab #4 - Visualizing Titanic Data

- ▶ Lab Instructions
- ▶ Lab Walkthrough(27:08)

Course Wrap-up

- ▶ When You Get Stuck(4:28)
- ▶ Continue Your Learning(3:12)

Learn to analyze data with R programming:

**9+ hours of video
8 hands-on exercises
4 hands-on labs
Lifetime access**

Dave
ON DATA

THE EXCEL TO ML TRANSFORMATION

Step 2 - The "Introduction to Machine Learning With R" self-paced online course. The math is optional!

Welcome

- Welcome to the Course!(11:11)

Supervised Learning

- Data Analyst, Teacher(16:56)
- Why Trees?(8:33)

The Data Sets

- The Data(14:17)
- Exploratory Data Analysis (EDA)(36:48)

Lab 1 - Titanic EDA

- Lab Instructions
- Lab Walkthrough(41:44)

Classification Trees

- Classification Tree Intuition(16:53)
- Overfitting Intuition(15:20)
- Gini Impurity(14:36)
- Gini Change(22:18)
- Many Categories Impurity(10:20)
- Numeric Feature Impurity(8:55)
- Classification Trees With Tidymodels(24:12)

Lab 2 - Titanic Classification Tree

- Lab Instructions
- Lab Walkthrough(22:58)

Awesome Classification Trees

- Under/Overfitting(12:47)
- The Bias-Variance Tradeoff(14:37)
- Supervising the Data(21:17)
- Model Tuning Intuition(23:36)
- Classification Tree Pruning(15:39)
- Measuring Awesomeness(22:18)
- Model Tuning With Tidymodels(30:54)

Lab 3 - Titanic Tree Tuning

- Lab Instructions
- Lab Walkthrough(31:24)

Feature Engineering

- Feature Engineering Intuition(18:36)
- Data Leakage(15:10)
- Decision Tree Feature Engineering(14:50)
- Missing Data(13:17)

Lab 4 - Titanic Feature Engineering

- Lab Instructions
- Lab Walkthrough(35:15)

Regression Trees

- Regression Trees Basics(10:29)
- Numeric Feature SSE(5:48)
- Many Categories SSE(5:06)
- Regression Trees With Tidymodels(15:14)

The Mighty Random Forest

- Bad, Tree! Bad!(9:15)
- Ensembles(7:28)
- Bagging(17:32)
- Feature Randomization(12:13)
- Tuning Random Forests(15:38)
- Feature Importance(19:47)
- Random Forests With Tidymodels(15:54)

Lab 5 - Titanic Random Forest

- Lab Instructions
- Lab Walkthrough(21:21)

Course Wrap-up

- Want to Kaggle?(13:10)
- Additional Resources(4:17)

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with machine learning:**

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