



Shiny: What, Why, and Examples

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Clara - Day 1



Clara - Day 8



Shiny: what and why

- R package for creating web apps with R
- Tool to Communicate your R analysis
- Interact with and explore your data
- State of the art data science: use all of R's packages
- Leverage the web's javascript charting and visualization libraries

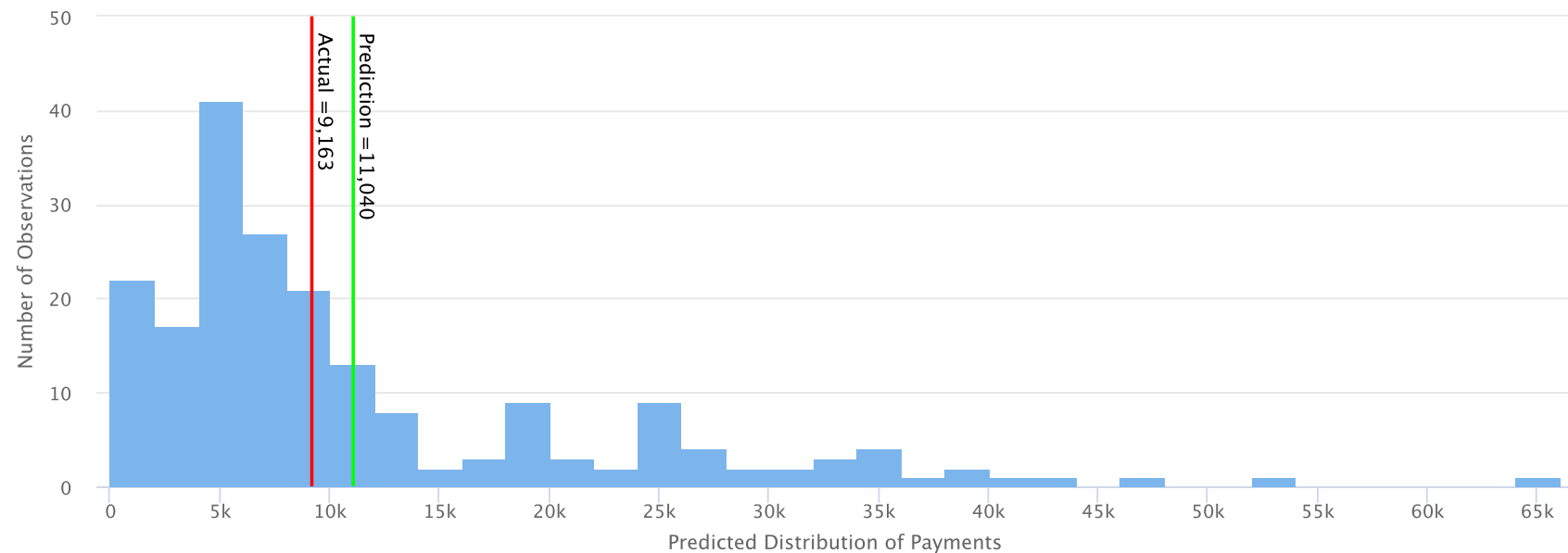
Shiny: R (xgboost) + Web (highcharts)

Claim Numbers

345499

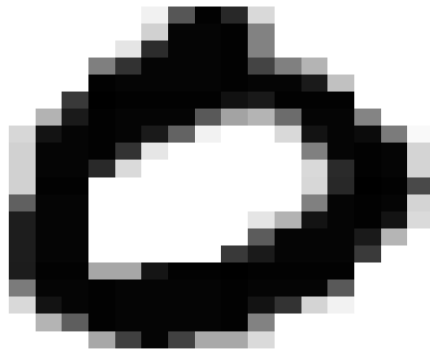
Payment Simulation for Claim 345499

Predicted Distribution of Payments between Age 1 and 2



Shiny: Deep Learning with **keras**

New Digit From Test Set



Digit	Predicted Probability
0	100.00%
1	0.00%
2	0.00%
3	0.00%
4	0.00%
5	0.00%
6	0.00%
Digit	Predicted Probability
7	0.00%
8	0.00%
9	0.00%

Shiny: what and why - developer perspective

- Simple
- Flexible
- Fast feedback loop
 - with yourself
 - with others

Shiny: simple

```
library(shiny)

ui <- fluidPage(
  textInput("text_input", "Text Input", value = "Hello"),
  h1(textOutput("text_out"))
)

server <- function(input, output) {
  output$text_out <- renderText({input$text_input})
}

shinyApp(ui, server)
```


Example Shiny Applications

Claims MGMT (https://tychobra.shinyapps.io/claims-mgmt_ea0a_1517610852632/)

WC PM (<https://tychobra.shinyapps.io/wc-pm-dashboard/>)

Additional Resources

Example apps with code and video descriptions on my website:

<https://www.tychobra.com/shiny/> (<https://www.tychobra.com/shiny/>)

Official Shiny website: <https://shiny.rstudio.com/> (<https://shiny.rstudio.com/>)