README

R You Ready for Neural Networks

Our group created a neural network that analyzes data of car crashes and predicts the injury severity of the passenger based on the attributes of the car crash. This was accomplished by using R along with the Keras package which is a high-level neural networks API.

Getting Started

Before installing the environment, verify you are running a Windows OS on your machine. Confirm that your machine is able to run the minimum specified requirements for RStudio found at
https://www.r-studio.com/Unformat_Help/index2.html?systemrequirements.html

Installing and Running

1) Install the R language Binaries at https://cran.r-project.org/bin/windows/base/
2) Install RStudio at https://download1.rstudio.org/RStudio-1.1.442.exe
3) Install Anaconda 5.1, Python 3.6 version at https://repo.continuum.io/archive/Anaconda3-5.1.0-Windows-x86_64.exe
4) Open RStudio and install the package “keras” using the console in RStudio, use the command `install.package(“keras”)`.
5) Install packages “plotly”, “caret”, and “e1071” using the same command `install.package(“<PackageName>”)`.
6) Open the project source file PredictingCarCrashInjuries.R in RStudio
7) After opening the project source file use: `Session>Set Working Directory>To Source File Location`
8) To run the complete file use `Code>Run Region>Run All` or use `Ctrl+Alt+R`
9) To run a subsection of the code highlight the code you wish to run and use `Ctrl+Enter`

To see the running code, please look at “code.pdf” file