

Excercise Scoring the Model (TBD until Exam!)

(You may work in groups or help each other as long as you understand the code and are able to modify/explain each relevant code line (same goes for pasted code from the web)).

[Previous Excercise](#)

Excercise 5 Get the classifier into your browser

- The predictive model markup language is a common export format for machine learning models. Use the R package pmml to export the classifier (if you want to go the easy way use a decision tree or a random forrest)
- Use the opencpu package to create a webserver that can return your model (tip use XML::saveXML to convert the returnvalue to a string)
- retrieve the XML from a webpage like this

```
var pmml = new Promise((resolve,reject) => {  
    var onSuccess = function(data) {resolve($.parseXML(dat  
  
    $.ajax({  
  
    type: "POST",  
  
    url: (this.base + "R/getPMML/json"),  
  
    data: 'json_data={"sensor": ' + JSON.stringify(this.sensors) +  
    ', "classes": ' + JSON.stringify(this.label) + ', "classifier":  
    "rpart"}',  
  
    success: onSuccess,  
  
    dataType: "json"  
  
    });  
    });
```

Excercise 6 Creating a Javascript predictor

- a. Create a decision tree (or any other classifier) from the XML (see e.g. <http://stackoverflow.com/questions/8368698/how-to-implement-a-decision-tree-in-javascript-looking-for-a-better-solution-th/8369235#8369235>, for the decision tree look for TreeModel and Node in the XML Dom) or use <https://github.com/riedel/jActivity2PMML/tree/master/inst/www> for a solution how to build the classifier....
- b. Use the code from excercise 1 to automatically execute your model (Note: you have to implement windowing and calculate the features you used in javascript)
- c. Check if its working :)

Excercise 7 Let the classifier make changes to your application

Think about a nice application to use the classifier

- a. to make a web application context sensitive (you may use [AWC-core](#) or [COP.js](#))
 1. You can change the Font-Size (via CSS)
 2. You can present different suggestion in a menu if some one is on the move
- b. Think about further applications and write them down
 1. What other inputs from the browser can be used as "sensor"
 2. What are interesting contexts