

Personal Development Report

ADS-A

Brent Schoenmakers | 2018-2019

# Summary

This will be filled in at the end of the semester.

Inhoud

[Summary 1](#_Toc523483084)

# Introduction

This personal development report is for me to document my experiences and growth as a data scientist. But first, I’m going to introduce myself.

My name is Brent Schoenmakers, and I live in a village called Oisterwijk. Oisterwijk is located near Tilburg, and it takes me about 40 minutes to travel to school. I chose to ICT as my study of choice, because I was always interested in how the computer really works. I was very interested in how certain programs work, and how they might work together with different programs, and how there is rarely an error presented to the user.

I’m currently in the 4th semester of Technology, meaning that I’ve already done a specialization route previous semester. This specialization was Game Design. But for this semester, I wanted to try something totally different. I specifically wanted to delve deeper into the world of machine learning, because I’ve always found it very interesting in how a machine makes predictions with the usage of algorithms. This is the reason I chose Applied Data Science as my second specialization route.

When starting this course, I had zero knowledge of machine learning or data frames. Basically, everything that I’ve learned this course is completely new to me.

# Learning objectives in Applied Data Science

In ADS-A there are 8 different objectives which I need to convince the teachers that I’ve grown in over the course of this semester. These are:

* **Reporting**
  + You are able to report in a methodologically sound way about a data analysis (plan, process documentation, report of final results, etc.).
* **Machine Learning**
  + You are able to apply machine learning algorithms for classification and regression (supervised learning) to a given data set.
* **Data Driven Organization**
  + You are able to explain what a ‘data driven organisation’ is, are able to argue on the maturity level of such organisation and are able to translate this into a business case for the application of data science.
* **Business Requirements**
  + You are able to translate business requirements into a structured data analysis plan.
* **Cross Validation**
  + You are able to improve the quality of machine learning models using cross validation techniques and systematic searches of the model’s hyper parameters.
* **Data Quality**
  + You are able to clean data sets according to theories of data quality, in such a way that the process of cleaning is repeatable and the final result is data set suitable for data analysis.
* **Data Ethics**
  + You are aware of, and are able to reflect on your own choices in terms of the fact that laws exist regarding digital data and can explain the term “data ethics”.
* **Work Ethos**
  + You are an effective co-worker in project groups, and are able to guide your own study progression by asking for, interpreting and applying feedback by teachers, tutors, coaches and fellow students.

Below I will elaborate on every single topic of the ones named above. I will describe how I have grown over the course of this semesters, and how I achieved that.