INFO C260F

Homework 2

Getting started with prediction (part 1)

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Team Name: “Four-layer Dip”

In this assignment, we were given the goal of getting familiar with response data. Our task was to generate a model that would make predictions on a student’s Nth response, given his or her 1st to N-1th responses. We were given data in two formats—a one row per response format, which included different features of the response and a one row per student format, which only included ordered responses for five questions.

For our approach, we wanted a challenge. We first tried to use the Bayesian Knowledge Tracing algorithm with the BKT package. Although it looked promising, we ran into a couple of installation issues, specifically with the Boost-Python library, so we eventually switched to Keras and tried to create a simple 4-layer Neural Network. After looking at the given data and the two data formats, we decided to simply use the second data set with the first five responses of each student to predict the sixth response.