

# Matrix Fun Stuff

Lukáš Hlaváč      Connor Alecks      Ivan Vnukov      Glorija Ringe  
Viktors Li                 Maria Haritonova

December 1, 2025 – December 6, 2025

## Exercise 1 *Food Ratings*

### 0.1 Introduction

We chose to use different, unrelated items from the McDonalds menu as we wanted to select a topic everyone had tried. The items we chose were:

- Big Mac
- Fillet-O-Fish
- McNuggets
- McFlurry (Oreo)
- Apple Pie
- Egg McMuffin
- Side Salad
- Hash Browns

We then all rated the items from -2 to 2 and stored them in json files so they could be used as vectors later on. After choosing Glorija as our person to estimate we then calculated the similarity of her answers to everyone else's for the first 4 items using the following formula:

$$\text{Cosine Similarity} = \frac{a \cdot b}{\|a\| \|b\|}$$

Using this formula, values close to 1 indicate strong similarity, values near 0 indicate no relationship, and values approaching -1 indicate strong opposition.

#### 0.1.1 Subsection 1

Content for subsection 1.

cell1	cell2	cell3
cell4	cell5	cell6
cell7	cell8	cell9