### Introduction

(Neural Networks Implementation and Application Tutorial)

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28th November 2021

### Overview

- Introduction
- Requirements
- Materials
- Assignments
- TODO (lecture content)
- Current assignment
- QA

# Hello

Who am I?

## Hello

Who am I?

Who are you?



#### Introduction

#### Choose and answer at least two questions:

- On scale from 1-10 how proficient are you in programming and mathematics?
- What topics of Neural Networks excite you the most?
- What topics of Neural Networks excite you the least?
- TODO

## Requirements

## Tutorial Requirements (exam admission)

- ullet 60% of mandatory points ( $\sim$ 10 assignments, 10 points each)
- Tutorial points only for exam admission (no final grade influence)

#### **Tutorial Bonus Points**

- ~2pts for extra exercises in the assignments
- 1pt for answering a question in a tutorial
- TODO pt for fixing errors in tutorial presentations
  - github.com/zouharvi/uds-nnia-tutorial
- Presenting a solution to the assignment (~5 points)
  - Let individual tutors known if you wish to present (in the respective tutor's channel)
  - Everyone can present at most once

### Final Project

Non

### Transfer from last year

Maybe possible

### What's available

- Lectures by Prof. Klakow (recorded)
- Tutorials (not recorded, but allowed for private sharing)
- Corrected homework
- Consultations
  - Only in specific cases
  - By default no email and no personal chat
  - Ask questions during the lecture / tutorials
- Public forum (please use Piazza) (link TODO)
  - Ask questions
  - ▶ Other students will also benefit from the answers
  - ▶ You can answer someone else's issue

## Assignments

- Mandatory groups of 2
- Usually 2 exercises per assignment + a possible bonus question
- Jupyter notebook templates
  - Assignment + solution in the same notebook
  - Can use Google Colab or local runtime
  - Write solutions in Python files and import them
  - Submitted notebook must only contain your analysis and outputs
- Only one submission per group
  - Submit through Teams

## Dates / Times

- Lecture: Tuesdays 14:15-15:45
- Tutorials:
  - Vilém: TBD
  - ► Noon: TBD
- Assignments
  - Released (usually) TBD (available in Teams)
  - ► Deadline (next) TBD (submit in Teams)
- Exam: TBD

#### **Tutorial Content**

- Review of the topics covered in class
- Presentation of the past assignment
- Discussing doubts in current assignment

## **Current Homework**

TBD

# Linear Algebra Basics

**TODO** 

# Numpy Basics

**TODO** 

#### Resources

- Course Website: lsv.uni-saarland.de/neural-networks-implementation-and-application-winter-2021-2022-2
- Piazza: https://piazza.com/ (TODO)
- Tutorial repository github.com/zouharvi/uds-nnia-tutorial
- Lecture & tutorial teams channels