Introduction

(Neural Networks Implementation and Application Tutorial)

Vilém Zouhar, Noon L. S. Pokaratsiri Goldstein

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)

- 60% of mandatory points (~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

- TBD

Transfer from last year

- Possible
- Do project and exam

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 8:30-10:00
- Tutorials:
  - Vilém: TBD
  - Noon: TBD
- Assignments
  - Released (usually) TBD (available in Teams)
  - Deadline (next) TBD (submit in Teams)
- Exam: TBD
- Project Deadline: 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

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