Computational Intelligence for Optimization

Practical Classes

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Office Hours:

The Plan

- Parallel to the theoretical classes

- Optimization techniques/methods
- Applying them on some problems

The language: Python
IDE: PyCharm

- Most of the classes will continue on the PyCharm IDE instead of pdfs.
- The codes will be uploaded on Moodle after the classes.
- The notes written during the classes might be shared on Moodle as well.

Evaluation: Project

- Topics will be published in April
- Theory + programming
- 3 or 4 people

Deliverables: 3rd of June, 09h00 (AM)

- Source Code
- Report

Oral Defense: 5-6 June

(7th may be included depending on the scheduling, I'll inform you)

NOVA IMS Information Management School

Computational Intelligence for Optimization

Practical Classes

Week I

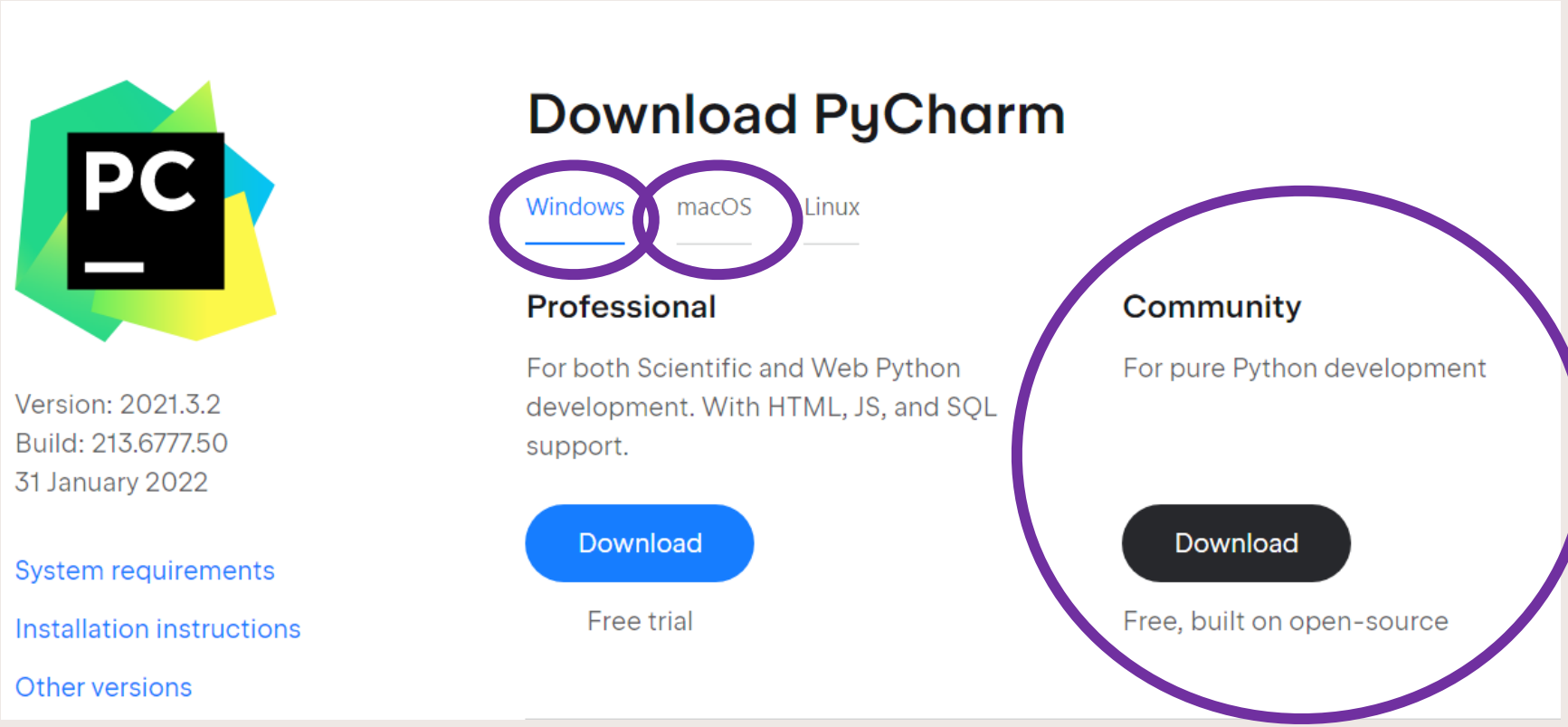
PyCharm & Introduction

Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

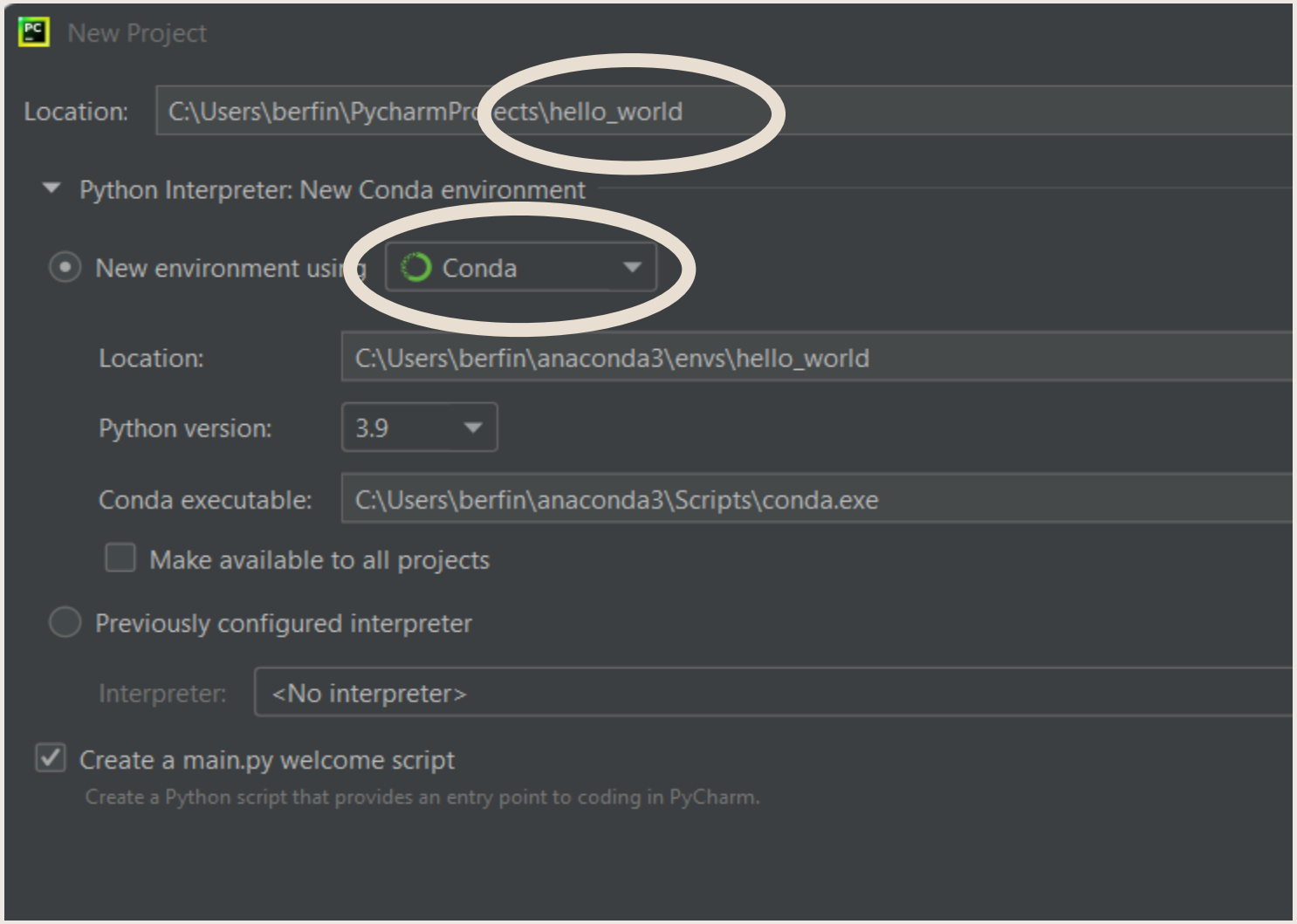
Berfin Sakallioglu

PyCharm

https://www.jetbrains.com/pycharm/download/#section=windows



New Project


New Project
Location:
C:\Users\berfin\PycharmProjects\hello_world
Python Interpreter: New Conda environment
New environment using
Conda
Location:
C:\Users\berfin\anaconda3\envs\hello_world
Python version:
3.9
Conda executable:
C:\Users\berfin\anaconda3\Scripts\conda.exe
Make available to all projects
Previously configured interpreter
Interpreter:
<No interpreter>
Create a main.py welcome script
Create a Python script that provides an entry point to coding in PyCharm.

Discovering PyCharm & Warm-up

- First hello world
- Different ways to run the code
- Creating and opening folders and files
- Python console
- Python packages
- Terminal
- Debugging

- Importing data
- Lists (list comprehensions, indexes, multi-dimensional lists)
- Functions