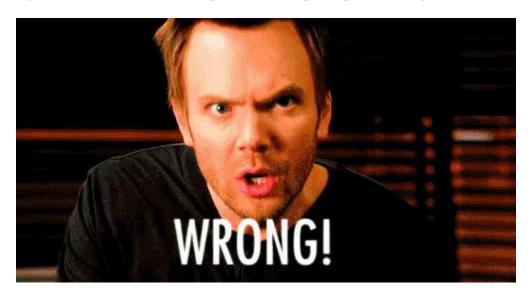
# Programming Languages

Intro to the course

# Why?

- You know probably Java, C, C++, ...
- You think that you master a program language and you can do everything



# You will become wise



# Why?

#### There are different ways to program!

With this course you will develop:

- skills in programming in different types of programming languages → easy to pick up new languages
- skills in analysing advantages and disadvantages of different language constructs → choose your own weapon
  - + It is a mandatory course;)

## How?

#### Two parallel threads

- Theory of Programming: study constructs and semantics of different languages (e.g., Scoping rules, Types, Parameters, Exceptions, ...)
  - Book
  - Standard frontal lectures
  - Jacopo Mauro
  - Mondays
- Haskell Functional programming language
  - Tutorial
  - Exercises
  - Peter Schneider-Kamp
  - The other frontal lecture days

## Exam

- 7 grades scale + Internal examiner
- Two parts that will merge the grade
- Need to pass both parts!
- Theory:
  - 4h written exam
  - No external auxiliary material allowed
- Haskell
  - Project with interim delivery and final report

## Material

- Theory:
  - Programming Languages: Principles and Paradigms (Gabbrielli Maurizio, Martini Simone) available freely through library
  - Slides
- Haskell
  - Thinking Functionally with Haskell by Richard Bird
  - Learn You a Haskell for Great Good by Miran Lopovaca

### Lecturer

- Theory Lecturer: Jacopo Mauro
  - https://jacopomauro.com
  - o mauro@imada.sdu.dk
  - Available before, after and during the break + appointments by email
- Haskell Lecturer: Peter Schneider-Kamp
  - https://sdu.dk/staff/petersk/
  - <u>petersk@imada.sdu.dk</u>
  - Available before, after and during the break + appointments by email
- Teaching assistant (TA):
  - Jonas Stisen <<u>josti15@student.sdu.dk</u>>

# Common Rules on Theory classes

- No laptop/mobile during the classes (unless used to take notes)
  - Taking notes by hand helps you remembering better!
- Lectures
  - Start 15 minutes past
  - Brake of only 5 minutes in the middle
  - We finish 10 minutes early