# Computer Programming

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### Who am I?

#### **Alberto Casagrande**

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An intro to the art of computer programming in C + some other useful notions

- what a programming language is
- how source code is related to applications
- some fundamental problem solving strategies
- few basic notions on OS and s ells
- a quick presentation of Git

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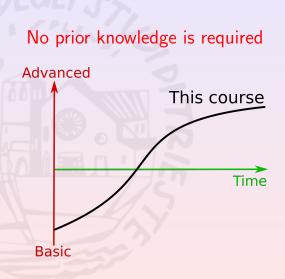
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#### We will see:

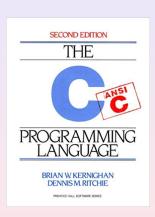
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# Suggested Textbook

The C Programming Language (2nd Edition)
Kernighan, Ritchie
Prentice Hall



You can find many free books and tutorials on-line.

### Course material

You can find it on Moodle as soon as released

https://moodle2.units.it/course/view.php?id=8265

## How will we learn?

- Frontal lessons
  - Examples of code
- Exercises and homework (no evaluation

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## When?

See a complete schedule of all the courses at

https://dssc.units.it/lecture-plan.

# Why learning computer programming?

- practice both analysis and formalization of complex problems
- perform tasks that are "hard" for human being (e.g., how many different ways to change 1M of euro in coins exist?)
- improve the efficiency of activities through automation (e.g., engine control)
- have fun (e.g, challenging friends for the shortest program that solves a given problem)

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- survive DSSC program
- . . .

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Programming languages are easier than Vietnamese, but still programming languages.

You have to exercise!!!

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Pre-courses do not have exams



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Many will come!!!

So, get ready as much as you can and exercise!!



# Question time



# Coming next...

- what are computers?
- what are programs?
- how computers do encode data and programs?
- what are programming languages?