europass

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ABOUT ME

I'm a boy with the passion for low level program language.
Up to now I studied:

- HTML, CSS, Js, JsQuery (for front-end)
- Python and batch: pipeline automatization, data analisy, back-end (Django)
- C, Also C++ and nasm x64: low level development

I like play with the esoteric program language such as BrainF*ck, JsF*ck for funny and usually I also read books about programming and read documentation given by the professor in Internet.
In my free time I help other people for solving computer science problem, or I teaching to other people for free my passion for computer science.

EDUCATION AND TRAINING

2019 – CURRENT Verona, Italy

HIGH SCHOOL DIPLOMA ITIS Guglielmo Marconi (VR)

The particle main subjects are computer science, system and network, project and tecnology.

INI (Computer science):

- How to use GitHub
- Development with python and batch for process automatization
- write and read file txt, csv, xml, json with python and pandas
- object oriented programming (OOP) but I have also learn how can be created at low level with pure C and asm
- automatization pipeline with python and batch

SRI (system and network):

- Assembly x16 for MsDos (with tasm compiler)
- Creation of virtual machine Windows and Linux
- assignament of address ip at virtual machine

TPI (project and tecnology):

- Basic batch command (operative system Linux-like and Windows-like)
- process with python, but I have also learn with C and nasm how it works

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LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B1	B2	B1	B1	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ADDITIONAL INFORMATION

PROJECTS

11/01/2024 – CURRENT
Compiler with python and nasm
I'm working on the following project:
Programs that when is given a source file (.volt), translate the specific code wrote in .volt to code assembly.
If everithing it's ok than the compiler create the .asm, than link and finally gives the program exe.

For run this program you must have:

- architecture of the cpu x64
- operative system Unix-like
- nasm
- ld

The only instruction (for now) fair in the .volt are:
- value assignament:

```
%define test 12
a = 12 + 25 - 32 // commento
b = "Hello World"
```

- value increment such as:

```
a += 253 + 33 -22
```

You can find more information at the following link:

Link https://github.com/naga272/compilatore

Brainf*ck
I'm working on the following project:
Python program that permise wrote a brainfuck program and run it. When start the program, is wrote in trace.log
- who run the program
- machine name
- when program is running
- program name

Whetever, into the directory "example_program" there is an example about a simple program .bf
The user from the gui can save the source code and in automatic they finish into the directory call "program_user".

You can find the project at the following link:

Link https://github.com/naga272/Brainfuck/tree/main/quarto_deploy/bf

14/04/2023
Simple C Virus
I worked on the following project:
C program that create forever thread, all this thread starts create a file with a different name and than wrote into forever.
The GUI is hide automatically at the start of the program.
For kill the program you can wrote from the cmd:
taskkill /F /IM <file.exe>

You can find the project at the following link:

Link https://github.com/naga272/virus/tree/main/virus

CURRENT
Emulator of an Operative System with JavaScript
I worked on the following project:

I creating with JavaScript a little operative system.
At the moment, I create a GUI and the apps upload are Python, cmd, notepad and google.

You can find the project at the following link:

Link https://brainfuck-project.netlify.app/os_js.html

VOLUNTEERING

CURRENT
Teach other people computer science
I like helping people that need help for this subject.
For example, I'm teaching at Marconi to the students.
I love talking about the philosophy of the regex and how to implement it in python, and I would like starting to talk about assembly with a student

HOBBIES AND INTERESTS

Read Books I like reading book especially about program language. My favorite is "The C Language", I found this book wonderful, how is written the source code and how is explained, it seems a story.
Another book wonderful is "Strange Code - Esoteric languages that make programming fun again" by: Ronald T. Kneusel.
Kneusel in this book explain the history about the program languages and explain how to reproduce an esoteric program language in C.
Also, I like read documentation in Internet, like "the preprocessor C" or "pointer at function".

You can find some books or documentation that I have read and particulary enjoyed:

Links https://www.amazon.it/linguaggio-Principi-programmazione-riferimento-Contenuto/dp/8891908231 | https://www.amazon.it/Strange-Code-Esoteric-Languages-Programming/dp/1718502400 | https://aguzzoli.di.unimi.it/didattica/algo03/lucidi9b.pdf | https://staff.polito.it/claudio.fornaro/CorsoC/15-Preprocessore.pdf

CERTIFICATIONS

08/07/2023
Python for machine learning and Artificial Intelligence

This 11.5 hour course about:
- OOP
- exctraction dates from file
- try, except, raise
- standard library
- use of numpy library
- create an Artificial Neural Network
- training an Neural Network

you can find a certificate obtained at the followig link:

Link https://github.com/naga272/certificazioni/blob/main/python_per_artificial_intelligence.pdf

25/06/2023
Object oriented programming with Python

This 3.5 hour course about:
- defining class
- ereditarity class
- super classi
- multiply ereditarity
- static methods and private attribute
- use of pip
- venv creation
- package creation
- create an .exe with pyinstaller

you can find a certificate obtained at the followig link:

Link https://github.com/naga272/certificazioni/blob/main/programmazione_ad_oggetti.pdf

04/02/2024
Django, Bootstrap e python

This 24 hour course about:
- How to create a Web Framework Django for the creation of Professional web application
- How to program with python 3 and the base OOP
- how to use Bootstrap 5 for create a Modern Site and responsive
- How to use HTML5 for the creation of web page and CSS for the personalizzation
- How to use Python 3 for the creation of back-end for a web site

you can find a certificate obtained at the followig link:

Link https://github.com/naga272/certificazioni/blob/main/Django.pdf

15/10/2023
HTML5 e CSS3

This 15 hour course about:
- general web page struct
- Using the intestations like h1, h2, h3
- Create order and unorder list
- Create form using the fieldset, input, select and the new tag html5
- The difference between <i> and <cite>, and <b>,and other tag
- understand how can be use the tag type block and the tag type inline
- Using tag audio and video
- Create table html
- Using Css for change the web page element

you can find a certificate obtained at the followig link:

Link https://github.com/naga272/certificazioni/blob/main/HTML5 e CSS3.pdf

boolean Week

I took a course about front-end development, including DOM manipulation with JavaScript, HTML5 and CSS:
- 5 live lesson (10 hours)
- 4 web apps created

you can find a certificate obtained at the followig link:

Link https://brainfuck-project.netlify.app/certificazioni/attestato boolean.pdf

05/02/2023
JavaScript

This 7 hour course about:
- variable type (Array, string, integer)
- Definition and call function
- Definition arrow function
- costruct if - else
- cicle like while, for and do-while
- basic oop (object Oriented Programming)
- the DOM (Document Object Model)
- JQuery

you can find a certificate obtained at the followig link:

Link https://github.com/naga272/certificazioni/blob/main/javascript_per_principianti.pdf

08/09/2023
assembler 8086

This 6 hour course about:
- Base command shell for operative system Linux
- cpu register
- general struct file .asm
- Assembly instraction
- conditional jump
- the array
- the stack
- assembly function
- Interface C with Assembly
- Input e Output

you can find a certificate obtained at the followig link:

Link https://github.com/naga272/certificazioni/blob/main/assembler_8086.pdf

29/01/2023

C Programming

This 6.5 hour course about:
- C library standard
- type of variable
- standard input and output
- iterator for, do-while, while, jump
- pointer
- function and prototype
- read and write with files
- compile a program from command line interface
- use of complex data types

you can find a certificate obtained at the followig link:

Link https://github.com/naga272/certificazioni/blob/main/programmazione_in_c.pdf

C++ programming

I took a corses about C++ for total of 25 hour:
- basic of c++
- selective costuct
- iterative costruct (while, do-while, for)
- array
- prototype
- struct
- dinamic memory
- function
- read and write on file
- OOP

you can find the certificate obtained at the following links

Links https://github.com/naga272/certificazioni/blob/main/programmazione_cpp.pdf | https://github.com/naga272/certificazioni/blob/main/programmazione_cpp_2.pdf