DAVID COCCORULLO

SOFTWARE DEVELOPER | DATA SCIENTIST | MACHINE LEARNING ENGINEER

PERSONAL INFO

Italian

he/him

September 28th, 2001

(+39) 329 455 5074

davidcoccorullo7@outlook.it

Via Giovanni Lanzalone, 11/bis
84126, Salerno (SA), Italy

My online portfolio (click)

github.com/davidcocc/

linkedin.com/in/davidcocc/

SKILLS

Python / **C** / **C++** / **Java** / **SQL** / **JavaScript** / **React** / **R** ...

AI and Machine Learning / **NLP** / **Computer Vision** / **Neural Networks** / **Deep Learning** ...

Unity / **Unreal Engine** / **VR** / **AR** / **Git** / **Linux** /
Adobe Creative Suite (*basic level*) / **blender** (*basic level*) ...

EDUCATION

University of Salerno

- **Master's Degree** in **Data Science & Machine Learning**

2023 - *ongoing*

University of Salerno

- **Bachelor's Degree** in **Computer Science**

2020 - 2023

I.I.S. Basilio Focaccia, Salerno

- **Higher Technical Institute Diploma**

2015 - 2020

LANGUAGES

English	**Italian**
C1 Level	Mother tongue
Full professional proficiency	

ABOUT ME

I am a passionate developer deeply in love with **Computer** and **Data Science**, with a robust programming background that spans almost a decade.
My coding journey began at a really young age, so I had the chance to explore different fields of computer science, leading now to my profound interest in **Artificial Intelligence**, **Machine Learning**, **Computer Vision**, and **Game Development**.
I have a strong passion for music, being a decent level self-taught guitar and bass player; it's always delightful to **experiment new ways** to merge computer science together with my hobbies.
I would consider myself to be an **open-minded person**, **creative** and **versatile**, always ready to **explore new points of view**.

MAIN PROJECTS *(more on my online portfolio)*

Space Buddy

For the Enterprise Application Development exam, me and my group have developing a **virtual reality game** in **Unity** supervised by a tutor from **Google**.
Our app provides a **virtual friend** (animated by a **chatbot**) who entertains users and play with them. The main target for the app are young people (18-24) who suffer from loneliness and might want a new virtual friend to spend time with to take a break from reality.
For Space Buddy, I worked on **both the technical and aesthetic aspect** of the game, building the chatbot, developing the game flow, modeling, animating and rigging the 3D character. I also took on the role of **leader**, directing and organizing the whole team workflow and communication.
The project participated in UniSA's **AppChallenge** and was evaluated with a score of **30 cum laude** out of 30.

Quantum NLP Pipeline for Security Requirements Classification

For my Bachelor's degree thesis, I implemented a **QNLP pipeline** to examine its **performance** in the task of constructing a **machine learning model** for **multi-class classification**.
The whole work has been tested on a dataset of **security requirements** from a health-care system, comparing the quantum model results with the ones obtained from a classical NLP pipeline trained on the same dataset.

SpotifAI

This project has been realized for the Artificial Intelligence Foundaments course, and it analyzes songs extracted from a user's Spotify profile, creating playlists based on the **similarity of songs** in terms of conveyed vibes and moods, with the ability to **predict** the most appropriate playlists for a new input song.
The final result led to interesting observations and has been evaluated with a score of **30 out of 30**.
In future, I intend to extend it with the ability of **suggesting songs** to add to said playlists basing the recommendations not only with tracks' musical mood, but taking into account languages and lyrics.

LetMeCook

This project has been realized for the Information Visualization exam, and consists in a **mobile cooking assistant** which uses **computer vision** to detect ingredients from a camera, in order to suggest new recipes to users thanks to a **LLM**, taking account of their food preferences and allergies.
It has been developed in Unity and has been deployed on Android devices and has been evaluated with a score of **30 cum laude** out of 30.

Music Generation Playground

This project has been developed for the Musimathics exam at the University of Salerno. The idea behind it is to build a **Machine Learning model** trained on MIDI files of musical pieces by the greatest classical composers who ever lived like Wolfgang Amadeus Mozart or Ludwig van Beethoven in order to **generate new musical scores based on their styles**. It will be improved in the future, with the goal of generating more appealing music scores.