




# DAVID COCCORULLO

SOFTWARE DEVELOPER | DATA SCIENTIST | MACHINE LEARNING ENGINEER

## PERSONAL INFO


 Italian

 he/him

 September 28th, 2001

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 [My online portfolio \(click\)](#)

 [github.com/davidcocc/](https://github.com/davidcocc/)

 [linkedin.com/in/davidcocc/](https://www.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

C1 Level  
Full professional  
proficiency

Italian

Mother tongue

## 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.

### ● SpotifyAI

This project has been realized for the Artificial Intelligence Foundations 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.