

Alessandro Picone

• Home: Via Piemonte 12, 21057, Olgiate Olona, Italy

Email: <u>ale@picone.it</u> **Phone:** (+39) 3911005708

Gitlab: https://axpico.github.io/

Gender: Male Date of birth: 12/09/2007 Nationality: Italian

ABOUT ME

I am a highly motivated high school student with a strong passion for software programming and artificial intelligence, aspiring to build a career in the field of technology. I have gained experience with various programming languages, including Python, Rust, and Java, and have worked on diverse projects in areas such as web scraping, automation, and machine learning. Some of my recent projects include developing an Amazon product scraper integrated with affiliate marketing using a Discord bot built in Rust, as well as creating a deep learning model in PyTorch to distinguish between real images and Al-generated ones.

I thrive in challenging tasks, enjoy researching emerging technologies, and excel at implementing innovative solutions to solve real-world problems. My goal is to further advance the intersection of artificial intelligence and software programming while becoming a productive contributor to the tech industry.

EDUCATION AND TRAIN-

[12/09/2023 - Current] High school diploma

ISIS Fachinetti https://isisfacchinetti.edu.it/

City: Castellanza, VA | Country: Italy |

[12/09/2023 - Current] High school diploma

Academica, International Studies https://ais.academica.org/

City: 6340 Sunset Drive, Miami, FL 33143 | Country: United States |

Certificate of participation for Al Bootcamp: A Gentle Introduction to

[10/06/2024 - 17/06/2024] Artificial Neural Networks and Computer Vision

TechCamp (Politecnico di Milano) https://techcamp.polimi.it/

City: Milan | Country: Italy | Level in EQF: EQF level 2

[12/09/2021 - 08/06/2023] **Two-year scientific high school**

Collegio Rotondi https://www.collegiorotondi.it/Objects/Home1.asp

[01/06/2021 – 30/06/2021] **Preliminary English Test (PET)**

Cambridge Assessment English www.cambridgeenglish.org

Level in EQF: EQF level 3

Certificate of participation for Advanced Coding Online Course with

[13/02/2021 – 29/03/2021] **Minecraft Education**

Digital Education Lab https://www.digitaleducationlab.it/corsi-educazione-digitale/

corso-online-avanzato-coding-minecraft-education/

Level in EQF: EQF level 2

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Spanish

LISTENING A1 READING A1 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

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

SKILLS

Programming Languages

Python | Rust | Java

Web Development

JavaScript | HTML & CSS

Version Control

Git | GitHub | GitLab

Operating Systems

Linux | Windows

Office Software

Word | PowerPoint | Excel

Soft skills

Problem-Solving | Time Management | Perseverance | Critical Thinking | Adaptabilit y | Attention to Detail | Teamwork and Collaboration

Infrastructure Management

Docker | Dev Containers

PROJECTS

[27/03/2025 - 01/04/2025] **Real vs AI Image Classifier**

This project aimed to develop a deep learning model for detecting real and deepfake images using PyTorch, leveraging a fine-tuned ResNet18 architecture. Key activities included curating and balancing datasets of real and fake images, implementing data augmentation techniques, and optimizing hyperparameters such as learning rates and batch sizes. The model's performance was evaluated through accuracy and loss metrics, while a high-confidence prediction scoring system was implemented to enhance the reliability of classification results. This iterative development process involved analyzing outcomes, debugging bottlenecks, and refining methodologies. The project provided hands-on experience with PyTorch workflows and deepened understanding of convolutional neural networks (CNNs), particularly their hierarchical feature extraction capabilities. Beyond the technical scope, the work underscored the ethical importance of deepfake detection in combating disinformation and preserving digital authenticity.

Link: https://github.com/axpico/image-classifier-ai-and-not

[26/09/2024 - 12/12/2024] Amazon Scraper Bot with Affiliate Links & Social Updates

This Rust Discord bot automates scraping Amazon items, creating affiliate links, and sending platform-agnostic notifications. It extracts data from Amazon web pages using JavaScript with headless_chrome, integrates with Discord via the serenity library, and posts announcements on X (Twitter) using HTTP requests that embed affiliate codes in the URLs. The bot sends real-time updates to Discord servers whenever new items are found

or prices drop. It operates asynchronously using tokio workflows and handles tasks such as API utilization (reqwest), HTML scraping (scraper), and secure credential storage (dotenv). To evade anti-bot detection, it implements retries and wait periods.

The bot was deployed and operated on an Ubuntu server, ensuring stability and scalability during continuous execution. This project enhanced my expertise in async Rust (tokio) for concurrent handling of Discord events and web scraping, as well as in dynamic web scraping using headless_chrome. I also gained experience deploying Discord bots with custom embeds and commands through the serenity framework, automating social media posts via direct HTTP requests, and securely managing API keys. Overcoming Amazon's anti-scraping mechanisms and tuning performance demonstrated my ability to build robust, efficient automation tools with Rust while adhering to best practices for error handling and designing extendable architectures.

Link: https://github.com/axpico/discord-bot-amazon

DRIVING LICENCE

Motorbikes: AM 25/09/2023 – 12/09/2034

HOBBIES AND INTERESTS

Intrests

Fascinated by the potential of artificial intelligence (AI), I am drawn to its applications in various fields, particularly in enhancing user experiences and automating processes. With a keen interest in game development, I am passionate about leveraging AI to create immersive and dynamic gaming experiences. My enthusiasm for video games extends beyond entertainment; I am intrigued by their potential as a medium for storytelling and interactive experiences. Additionally, I am deeply invested in exploring new technologies that push the boundaries of what is possible in AI, game development, and the broader tech landscape.

Sport

I dedicate most of the free time I can find to 10m air shooting, a sport that constantly challenges my focus, concentration, and mental control. Before discovering this sport, I trained in karate, swimming, and tennis—each of which had a profound impact on me individually.

In karate, I reached the brown belt, a milestone that represents maturity and readiness for advanced techniques. To achieve this level, I progressed through several belt colors, including blue before earning the brown belt. The journey required consistent training, perseverance, and mastering fundamental techniques such as stances, katas, and kumite. Karate taught me the importance of discipline, bravery, and self-control. From swimming, I learned perseverance and the value of staying committed to a goal despite obstacles. Tennis instilled in me skills such as hand-eye coordination, mental clarity, and strategic thinking. Together, these sports strengthened both my body and mind, shaping me into the person I am today.

Now, with the experience of air shooting, I am applying the lessons of perseverance, commitment, and persistence that I gained from my past endeavors. With every shot I take, I have the opportunity to put these lessons into practice while continuously improving my skills.

VOLUNTEERING

[17/06/2024 - 12/07/2024]

Animator at the summer center Olgiate Olona

As an Animator at the summer center, I organized engaging activities for children, ensuring a safe and inclusive environment for all participants. I collaborated with fellow animators to plan daily schedules and special events, fostering teamwork and creativity.

My role involved developing and implementing creative programs that promoted learning while maintaining a fun atmosphere. I actively contributed to creating memorable experiences for the children, encouraging their personal growth and social skills development throughout the summer program.