Flavia Trotolo | [Portfolio](#)

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EDUCATION

New York University Abu Dhabi, UAE   May 2024
Bachelor of Science in Computer Engineering, Minor in Arabic Language
GPA: 3.7/4 Acceptance rate 3% *(full scholarship)*

Li Po Chun United World College, Hong Kong, China   May 2020
International Baccalaureate Diploma *(full merit-based scholarship)*

WORK EXPERIENCE

Front-End Developer at Milipol International Est, Abu Dhabi   October 2022- Present
- Developed **back-end** solution of a non-disclosable product for a small-scale audience in the Gulf, including a comprehensive database for customers, password hashing and authentication, and check-out gate. The application interacts in real-time with foreign programs using a combination of Python APIs
- Designed and implemented a **dynamic** and comprehensive **user interface** with Bootstrap library and branded the product with a unique name, logo, and colors
- Produced numerous blackboard 2D animations in accordance to industry standards amounting to more than 15 minutes of animation, designed script and synced audio with animation using DaVinci Resolve

Researcher at The Applied Interactive Media Laboratory   March 2022-September 2022
(Professor Mohammed Eid, New York University)
- Created avatars in MakeHuman with complete anatomic geometries
- Conveyed realistic **human expressions** in generic avatars through complete facial and body rigging with the use of Rigify and Mixamo plugins, weight painting, and shape keys in [Blender](#)
- Implemented **Motion Capture** for generic avatar with Kinect v2 camera in Unity environment
- Implemented **Application** for experiment for Haptic Jacket and emotion regulation using Python and Flask

Platform Specialist at Provenly, Abu Dhabi,   Jan 2022 – February 2022

Developed **Front-end** Software Solutions for the administration of business administration services using WordPress and Squarespace

PROJECTS

- Designed **[Dynamic Website](#)** for personal portfolio using HTML, CSS, and Bootstrap library
- **[TV interview](#) in Arabic for Emirattv** in occasion of the UN Arabic Language Day on the 18th of December 2022
- Designed and implemented functioning **MIPS Central Processing Unit** using Verilog (PC, IM, RF, ALU, DM) valid for R-type; I-type; J-type instructions in Verilog including hardware detection unit and forwarding under the supervision of instructor Prince Steven Annour
- Program in **Assembly language** (MIPS) to multiply matrices, and find pow(n,x) recursively
- Created a customizable **C++ dynamic calendar** using object-oriented programming paradigms
- Implemented **[Artificial Intelligence Art Generation Gallery](#)** using and modifying existing AI art generators
- **[Music Video Animation](#)** of mixamo-rigged male avatar combining animations in the non-linear editor in Blender
- **Blog** [the Independent](#): developed front-end platform for a small journalistic project in the university

SKILLS: C++, Python, HTML, CSS, JavaScript, Flask, VHDL, Verilog, MIPS, Blender, Unity

LANGUAGES: Italian, Native Fluency; **English**, Business Fluency; **Arabic** Business Fluency, **Spanish**, Advanced