

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

- Architected a Back-end solution of a non-disclosable product for a small-scale audience in the Gulf in a team of two developers. The software was implemented using Flash and SQLAlchemy
- Designed algorithms for web scraping with BeautifulSoup, user recommendations, and survey algorithms. Connected different python strategies to influence variables of foreign software, and extracted financial data for interactive graphs through Chart.js, Matplotlib, and Pandas.
- Implemented and debugged check-out gate with stripe API accompanied by vital security features of hashing, and unique reCAPTCHA and OTP authentication for ensuring secure transactions.
- Designed and implemented a dynamic and comprehensive user interface with Bootstrap library and branded the product with a unique name, logo, and colors as the solo front-end Developer
- Produced numerous blackboard 2D animations as per 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
2022**

March 2022-September

(Professor Mohammed Eid, New York University)

- Implemented Web Application for experiment for Haptic Jacket and emotion regulation using Flask. Produced scripts to control the Haptic Jacket and configure sequences of 108 different vibrational patterns.
- Created avatars in MakeHuman with complete anatomic geometries. Conveyed realistic human expressions in generic avatars through complete facial and body rigging (Rigify and Mixamo plugins), weight painting, and shape keys in Blender. Produced Music Video Animation of a Mixamo-rigged male avatar combining animations in the non-linear editor in Blender
- Implemented Real-time Motion Capture for generic avatar with Kinect v2 camera in Unity environment

Platform Specialist at Provenly, Abu Dhabi,

Jan 2022 – February 2022

Developed four dynamic **Front-end** Software Solutions for business administration services using WordPress and Squarespace.

PROJECTS

- Designed a [Dynamic Website](#) for the personal portfolio using HTML, CSS, and Bootstrap library
- 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
- Implemented Programs in [Assembly language](#) (MIPS) to multiply matrices, and find $\text{pow}(n,x)$ recursively
- Created a [Customizable C++ Calendar](#) using object-oriented programming paradigms
- Designed 15 interactive p5.js designs using iterations, trigonometry, and perspective.
- Led [Blog the Independent](#): started front-end platform for a small journalistic project in the university
- Participated in a public **TV interview in Arabic for Emirattv** on the occasion of the UN Arabic Language Day on the 18th of December 2022:
<https://twitter.com/emarattv/status/1604562415978287105?s=20&t=ZEPIJ4KhG5YY0c7sU VDDQ>

SKILLS: C++, Python, HTML, CSS, JavaScript, Flask, MySQL, Blender, Unity, VHDL, Verilog, MIPS, X86, Matlab

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