Fernando Villamarin Diaz

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Work Experience

JP Morgan **Jun 2022 – Aug 2022**
Software Engineer Intern London, United Kingdom

- Created reporting tools for more accurate pricing and management of bonds and futures. I worked in the Currencies and Emerging Markets team, interacting with Front and Middle Offices.

HP **Sep 2021 – Dec 2021**
Software Engineer Intern Barcelona, Spain

- Developed drivers in C/C++ and C#, as part of the Large Format Printers team.

La Salle University **Sep 2019 – Oct 2020**
Research Assistant Barcelona, Spain

- Synthesized and merged relevant research about IoT Application Layer Protocols (HTTP, MQTT, AMQP…), in order to create a framework to accelerate decision making.

La Salle University **Sep 2018 – Jul 2021**
Teaching Assistant Barcelona, Spain

- Planned and introduced a total of 12 practical assignments to help students assimilate the contents of the subjects of Calculus and Statistical & Mathematical Analysis.

Education

Georgia Institute of Technology **2022 – 2024**
Master of Science in Computer Science – Specialization in Machine Learning Atlanta, Georgia (Remote)

La Salle University **2017 – 2022**
Bachelor's Degree in Computer Engineering – GPA 9/10 (Academic Distinction Award) Barcelona, Spain

La Salle University **2017 – 2023**
Bachelor's Degree in Business Management – GPA 9/10 (Academic Distinction Award) Barcelona, Spain

Technologies

- **Languages**: Swift, Python, Java, C/C++, C#, Assembly, TypeScript, JavaScript, SQL
- **Technologies**: Linux, Docker, Git, Riverbed, RTOS, Arduino, PCB Design, Proteus
- **Frameworks**: React, Bokeh, TensorFlow, Keras, Django, Spring

Projects

- **Wi-Fi capable 8-bit Computer -** Engineered and successfully assembled a computer based on the 1980's MOS 6502 8-bit microprocessor, the same one used for the Apple II and the NES. Enabled Wi-Fi and Bluetooth capabilities by interfacing with an ESP32 microcontroller.
- **Custom Language Compiler -** Developed a compiler for general-purpose language in both Python and TypeScript.
- **Machine Learning Transport Protocol -** Enhanced the functionalities of the EAATP protocol with Machine Learning to increase the efficiency of Cloud data exchange over Heterogeneous Long Fat Networks (HLFN).