Lenin Jhoan Cruz Quishpe

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Education

2017-2021 **The University of Manchester**
BEng (Hons) Mechatronics Engineering with Industrial Experience (WIE)

First year score: First class (78/100)

- Relevant courses: C programming (83%), Mathematics (84%), Electronics Materials (74%) Energy, Transport and Conversion (83%), Digital Systems Design (64%), Microcontroller Engineering (77%), Electronic Circuit design (82%), Measurements and Analytical Software (75%).

Second year score: First class (75/100)

- Relevant courses: Electronic Circuit Design II (77%), Engineering management (78%), Control Systems I (83%), Applied Mechanics & Industrial Robotics (66%), Microcontroller Engineering II (68%), Embedded Systems Project (76%), Machines, Drives and Power Electronics (75%),

2016-2017 **INTO Manchester** NCUK points: 168/168
A-levels: Physics (A*), Further Maths (A*), Maths (A*).

Academic Projects

Second Year Team Project: Line follower Robot buggy developed in C++ using a STM32 microcontroller board. The robot navigates autonomously around a track based on a PID algorithm for position and speed using encoders and reflective sensors.

Main activities: Hardware design (CAD, PCB), Control Algorithm implementation, Sensor Characterization and Data Analysis.

MBED Mini-project: User-friendly alarm clock device. It makes use of a NUCLEO-F401RE board and a MBED application shield as the mainstays. It has been developed in C++ language using the Mbed library and the online compiler

NASA Space Apps Challenge: Team project: desktop mini-game developed using windows forms (.NET Framework) and C#. The game is aimed to museums interactive rooms to tell the story of the construction of NASA's James Webb Space Telescope.

Experience

July 2019 – June 2020(Ongoing)

Engineering Intern at AVL Powertrain UK Ltd (Placement year)

- Assist with automotive software development activities:
  - Design and implementation of a Simulink Model for vehicle short-range object detection with Ultrasonic sensors.
  - Sensor (GPS, Ultrasonic, RADAR, Mobileye, IMU, Polysync) Data Analysis with MATLAB.
  - SW Tool development for Software Testing automation with MATLAB and MS Word VBA.
  - SW component testing and reporting with Simulink Test Manager and Report Generator.
  - GUI development for data visualization with Python and PyQt5.

Oct 2018 – April 2019

Visitor Engagement Volunteer at Museum of Science and Industry

- Greet visitors and ensure all their requirements are met by providing a high standard customer service.
- Engage with visitors, providing information about the Electricity exhibition and future programmes as well as promoting activities, events, services and the retail offer.

Sept 2018 – April 2019

Peer Assisted Study Session (PASS) Leader

- To help first-year students to adjust to University life by sharing personal student experiences, offering advice and directing them to relevant services and support.
- Planning and running weekly PASS sessions for the attendees offering facilitated learning.

Sept 2018 – April 2019

Spanish language tutor with the Linguistic Society at the University of Manchester

- To help attendees to understand Spanish, speak it and be able to write and read it.
- To run weekly language lessons including preparation of paper work and learning activities.

March 2018 - June 2018

Manchester Calling Campaign (International office at The University of Manchester) – Part Time job

- To provide an informal conversation to University offer holders around the world via phone call.
- Duties included giving reminders about new academic year and answering questions regarding studying and living in Manchester.

Hard Skills

Programming Languages:	MATLAB, SIMULINK, C, C++, C#, Python, Assembly, VHDL, HTML5, VBA (Visual Basic for Applications).
Computer software:	LabVIEW, Multisim, Altium CAD, SOLIDWORKS, Xilinx ISE, CANalyzer.
MCUs:	PIC18F8722, NUCLEO-F401RE, Arduino-Uno.
Lab equipment:	NI ELVIS II board, NI myDaq, Oscilloscope, Function generator, Multimeter
Project Management tools:	Gantt Project, Integrity PTC, Microsoft Planner.
Languages:	Spanish (Native), English (C2), French (A1).

Awards

SENESCYT, Ecuadorian Government (2015)

- Full scholarship (£250,000) for higher education studies at The University of Manchester awarded in the Ecuadorian National Exam taken in 2015.

- Ranked in the top 100 best scores around the country.

References available upon request