

CHRISTIAN PÉREZ PÉREZ

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QUALIFICATIONS PROFILE

Electrical Engineer with more than 10 years of experience in the bio-pharmaceutical industry, specializing in manufacturing operations, validation, and performance qualifications. Demonstrated expertise in GMP compliance, FDA regulations, and aseptic vial/syringe filling processes. Skilled in automation, deep learning, image processing, and software development. Bilingual (English/Spanish) and recognized for strong problem-solving capabilities, excellent communication, and a track record of optimizing complex systems in regulated environments.

- ◆ Deep Learning
- ◆ Isolators
- ◆ Unity 3D
- ◆ Troubleshooting & Data Analysis
- ◆ PLC/HMI programming-Rockwell
- ◆ Electrical Diagrams & P&ID
- ◆ CDOCS-Owner role
- ◆ Python, MATLAB, R, C#, Java, VBA
- ◆ Modern & Classical Control design
- ◆ Image Processing
- ◆ xGMP, CAPA, Change Control & Deviation Handling

PROFESSIONAL BACKGROUND

AMGEN, Juncos, PR (August 2014 – Present)

Sr. Scientist (July 2023 – Present)

- Technical lead for the AML-14 Crimp Vision Crimp inspection project.
 - Create and implemented an algorithm that uses point cloud data (3D information) to detect defective crimping in vials.
- Developed an image augmentation software for glass containers using Python, leveraging inpainting and Poisson image blending techniques.
- Leading the process development for the Recipe Development Unit (RDU) system in syringe Automatic Vision Inspection.

Scientists (September 2022 – July 2023)

- Optimized Automatic Vision Inspection (AML-1 Line 628).
 - Implemented classic image processing tools and tested deep learning classification models.

Sr. Engineer (System Owner) (April 2020 - September 2022)

- AML-14 Vial Filling Line System Owner:
 - Developed VBA automation tools for parameter, alarm, and event counting.
- AML-14 Syringe Filling Line System Owner:
 - Developed VBA automation tools for parameter, alarm, and event counting.
 - Created an E-Beam parameter search tool to enhance process efficiency.
 - Troubleshoot equipment related issues.

Engineer (System Owner) (July 2016 – April 2020)

- Change Control Owner for:
 - New Isolator Glove Integrity Testers (GIT) for Vials & Syringe lines.
 - Solo VPE upgrade
 - Decontamination Cycle optimization
- Created VBA program to capture data from PI and obtain Component Prep equipment efficiency:
 - Success rates calculation
 - Equipment uptime calculation
 - Supported Part Washer Overall Equipment Effectiveness OEE tool creation.
- System Owner for AML14's Analytical Lab & Syringe Filling Processes.
- Supported System Owner activities for component prep.
- Deviation & CAPA Owner, responsible for documentation and compliance.
- Solo VPE periodic review

Associate Tech Engineering (August 2014 – July 2016)

- Provided troubleshooting support for manufacturing systems.
- Participated in DiD and FMEA for a new filtration skid system.
- Participated in the new filtration skid Functional tests (FT).
- SME for Filtration Skid, E-beam, and Material Transfer Isolator (MTI).

Mobile Game Development

Independent Game Developer (Self Learned)

- Completely develop a voice reacting game **SensiTori**
 - C# programming
 - Unity for game development

Invision Engineering Corp. at AMGEN Juncos, PR (September 2013 – August 2014)

Automation Specialist

- Supported startup operations for AML-14 new filling facility.
- Parameter adjustments as need for equipment and processes.

University of Puerto Rico, Mayagüez, PR

Cervecera de PR

- Level and quality control of Evaporative Condensers with PLC and HMI implementation, for the Capstone project

Other projects:

- Water Level control using Labview.
- Matlab & Simulink Control of a Linear Flexible Joint Cart Plus Single Inverted Pendulum using three methods: Pole Placement, Observer Implementation, and State Variable Addition.
- Homography Matrix Transformation for License Plate Recognition (Image Processing with MATLAB).

EDUCATION

MEEE in Electrical Engineering with emphasis in Digital Signal Processing

Polytechnic University of Puerto Rico- (June 2024)

MECE in Computer Engineering with emphasis in Software Engineering (2023)

Polytechnic University of Puerto Rico-

Bachelor's Degree in Electrical Engineering with emphasis in Control Systems (2013)

University of Puerto Rico, Mayagüez, PR