# Victor Alvarez

## Senior Automation Engineer

Durham, NC (919) 555-0167 victor.alvarez@email.com linkedin.com/in/victoralvarez

## SUMMARY

Senior Automation Engineer with 9 years in biologics and pharmaceutical manufacturing, owning PLC, SCADA and MES systems in GMP plants. Leads validation of automated equipment under GAMP 5 and 21 CFR Part 11, ties instrumentation into the controls layer, and writes SQL and Python for batch data.

## EXPERIENCE

### Senior Automation Engineer

06/2021 - Present

Triangle Biologics Manufacturing — Durham, NC

*Contract biologics plant with 2 bioreactor suites and an aseptic fill line.*

- Own automation for **2** bioreactor suites and a fill line, covering 40 PLCs and 3,000 SCADA tags.
- Validate automation changes under GAMP 5, writing and executing 60+ protocols a year with zero critical audit findings.
- Integrate the MES with batch controls so electronic batch records pull process data, cutting review time by 35%.
- Mentor 3 automation engineers on PLC programming, change control and instrumentation calibration records.

### Automation Engineer

07/2017 - 05/2021

Cape Fear Biotech — Wilmington, NC

*Pharmaceutical ingredient plant running 24/7.*

- Programmed Siemens PLCs and SCADA screens for buffer prep and clean-in-place skids.
- Configured 250+ instrumentation loops, including flow, pH and dissolved oxygen, during a plant expansion.
- Resolved alarm floods by rationalizing 1,400 alarms, lowering operator alarm rates by 60%.
- Wrote 30 IQ and OQ protocols for new skids and executed them with quality during the 2019 expansion.

### Process Engineering Co-op

01/2016 - 08/2016

Neuse River Pharmaceuticals — Clayton, NC

*Oral solid dose plant; co-op during the chemical engineering degree.*

- Updated 45 batch records and SOPs after a granulation line upgrade.
- Walked down 120 instrument loops with technicians to verify tags against P&IDs.
- Trended dryer temperature data in Excel for 3 product campaigns.

## SKILLS

- **PLC Programming**
- **SCADA**
- **MES**
- **Validation**
- **GAMP 5**
- **21 CFR Part 11**
- **Instrumentation**
- **Siemens**
- **SQL**
- **Python**

## EDUCATION

### Bachelor of Science

North Carolina State University

Chemical Engineering

Raleigh, NC

05/2017

## CERTIFICATES

### Certified Automation Professional (CAP)

International Society of Automation (ISA)

2022