MOHAMED FAYAZ PEER MOHAMED

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PROFESSIONAL SUMMARY

Enthusiastic and technically skilled **PLC Programmer / Automation Engineer** with hands-on experience in industrial automation using **Siemens TIA Portal**, **Allen-Bradley Micro850**, **Factory I/O**, and **Ignition SCADA**. Completed multiple projects including automated filling, sorting, and monitoring systems using ladder logic and sensor-actuator integration. Familiar with OPC server-client setups and SCADA communication for real-time control. Eager to contribute to dynamic engineering teams and grow in the field of industrial automation and control systems.

EDUCATION

Master of Science in Electrical Engineering *Aug 2023 – May 2025*
University of South Florida (USF), Tampa, FL
Cumulative GPA: 3.59

Bachelor of Engineering in Electronics and Communication Engineering *Aug 2017 – May 2021*
Rajalakshmi Engineering College (REC), Tamil Nadu, India
Cumulative GPA: 8.39

SKILLS

Programming Languages: C, Python, MATLAB, RAPID, ROS, VHDL
PLC Software: RSlogix500**,** RSLogix 5000, Siemens TIA Portal, Allen Bradley PLCs, Siemens S7-1200 PLCs, Factory I/O, Connected Components Workbench
SCADA & HMI Tools: Ignition SCADA, FactoryTalk View ME, PanelView, Wonderware InTouch
Robot Programming & Simulation: ABB Robot Studio, RAPID, Factory I/O
Data Analysis & Visualization: Power BI, Tableau, SQL, PostgreSQL
Simulation & CAD: MATLAB/Simulink, Autodesk Revit Electrical, Fusion 360
Certifications: PLC Programming – Allen Bradley & Siemens (TIA Portal)

RELEVANT EXPERIENCE

Graduate Teaching Assistant, University of South Florida, FL *Aug 2024 – May 2025*

- Delivered 30+ lab sessions on robotics, control systems, and embedded systems, ensuring hands-on learning for undergraduate students.
- Supported 50+ students in debugging sensor-actuator circuits and microcontroller-based applications.
- Collaborated with faculty to build 5+ interactive demos, improving lab engagement scores by 40%.

KEY PROJECTS

Height-Based Sorting System – Siemens TIA Portal (S7-1200), Factory I/O *June 2025*

- Developed PLC logic in TIA Portal to detect and sort boxes by height using sensors and actuators, reducing sorting cycle time by 30%.
- Implemented fully automated logic with no manual intervention, ensuring consistent throughput and system reliability.
- Performed virtual commissioning in Factory I/O, achieving 15% higher simulation accuracy through refined sensor-actuator integration.

Water Tank Automation System – Micro850 PLC, Connected Components Workbench, Factory I/O, Ignition SCADA *July 2025*

- Programmed a tank control system using Micro850 PLC; initiated 15-second fill cycle on Start command and tank discharge on Stop command.
- Integrated with Ignition SCADA via Cogent DataHub OPC client-server, enabling real-time monitoring and remote operation.
- Validated control logic through Factory I/O simulation for reliable valve control, tank level management, and system response.

Beverage Filling Automation – Allen-Bradley PLC, TLP LogixPro Simulator *July 2025*

- Built a beverage filling system in TLP LogixPro using ladder logic to control solenoid valves, proximity sensors, and conveyor motors.
- Automated filling process using sensor-based logic and internal markers to trigger run/fill/full indicators with safety interlocks.
- Simulated an industrial bottling environment and optimized control flow for precise and efficient filling cycles.

PUBLICATIONS

Published a research paper titled “Typical MANET Design for 5G Communication Networks” in the International Journal of Lecture Notes in Networks and Systems, Volume 356, SCOPUS Indexed, published by Ambient Communications and Computer Systems.