Alexander Porrone

Engineering Manger - Robotics and Controls

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EDUCATION

2015 – 2019 London, ON, Canada	**Bachelor of Arts, Honors Business Administration (HBA)** *Ivey Business School, Western University* Dean's Honor List, 2015 – 2019
2013 – 2019 London, ON, Canada	**Bachelor of Engineering Science, Mechatronic Systems Engineering with Professional Internship** *Western University* Dean's Honor List, 2013 – 2019

PROFESSIONAL EXPERIENCE

2022 Apr – Present
London, ON, Canada

Engineering Manager - Robotics and Controls
JMP Solutions - Automation & Robotics 🔗

- Contributed to refining the annual performance planning cycle, including a comprehensive skills matrix emphasizing technical proficiency and interpersonal abilities. Managed performance reviews for a team of twenty, fostering their growth.
- Merged the robotics and controls division of two additional business units, synthesizing the best practices from each to create innovative, standardized procedures.
- Implemented cross-segment and inter-company resource sharing across seven segments and three distinct companies, effectively leveling workloads and averting the need for layoffs during periods of reduced activity.
- Guaranteed the success of all ongoing projects by proactively identifying and mitigating risks from the project's inception. Established triage plans to effectively manage external factors beyond our control.

2020 – 2022
London, ON, Canada

Team Leader - Robotics and Controls
JMP Solutions - Automation & Robotics 🔗

- Accountable for the performance review cycle and subsequent development of a team of seven direct reports.
- Responsible for staffing recommendations, interviewing, and recruitment efforts.
- Ensured consistency between all ongoing projects through the development and documentation of PLC, robot, HMI, and vision programming and process standards.
- Collaborated with other managers to assign and schedule resources on projects and ensure project success.
- Established and reinforced our culture through proactive planning and communication to ensure alignment to JMP's core values of integrity, collaboration, and respect.

2019 – 2020
London, ON, Canada

Robotics and Controls Specialist
JMP Solutions - Automation & Robotics 🔗

- Contributed to a variety of robotic projects including case packers, palletizers, and assembly cells while ensuring prompt support and thorough engagement with a variety of internal and external team members.
- Programmed PLCs, robots, motion systems, and vision systems for JMP's custom automation equipment, resulting in proper subsystem integration and seamless customer installation.

- Tested all equipment at JMP prior to installation to guarantee project success when at customer sites and mitigate risks prior to startup.
- Exercise project management skills through risk planning, scheduling, and supporting customers resulting in my projects being on time and under budget.

2017 – 2018
London, ON, Canada

Product Developer / Product Tester
Startech.com 🔗

- Collaborated with international vendors as well as internal departments to ensure the seamless development of new products that are ready to be launched.
- Designed products using CAD software and tested them through the use of a 3D printer to ensure they were functional before submitting the design to OEM vendors for review.
- Worked through multiple design samples and iterations to eliminate product deficiencies with international vendors.
- Wrote VBA scripts in Microsoft Excel to automate laborious tasks being performed by multiple individuals in the company.

PROJECTS - VIDEO LINKS BELOW

2021 – 2022

Robotic Automated High Speed Sandwich Assembly 🔗
JMP Solutions

- Highspeed and automated creation of burgers fed into a flow wrapper.
- Second place contender for FANUC ASI (Authorized Systems Integrator) conference.
- Programmed a dynamic PID loop to synchronize a timing wheel and conveyors used in bread separation.

2021 – 2021

Robotic Product Stacker and Label Applier 🔗
JMP Solutions

- Highspeed stacking via ABB delta robots through line tracking and visual identification.
- Label application via third-party labeler integrated with our system.
- Vision inspection via a Cognex camera and subsequent product rejection via a software cammed servo.

2013 – 2019

Western SAE Formula Racing Club - Electric Race Car 🔗
High Voltage Electrical Team Lead

- Designed and built a 400v battery for an FSAE vehicle including charge cart, safeties, and battery management system.
- Transitioned from a combustion vehicle to an electric vehicle in a single year. Only four teams had done this before us, many other teams took over two years.
- Mentored new recruits to assure successful completion of the car and to pass information on to the next generation of students.
- Surpassed all guidelines through vigorous security checks to ensure both driver and pedestrian safety and ensure technical inspection completion at competitions.
- Programmed microcontrollers using C++ and Arduino programming languages to manage electrical systems on our car.
- Designed a new wiring harness for the car to alleviate routing and documentation issues that occurred in previous harnesses.

PERSONAL ENDEAVORS

Self Hosted Services
-Unraid server setup and management
-Personal website
-Docker containerization and orchestration
-Media server configuration
-Self-hosted request systems
-Nginx reverse proxy forwarding
-WireGuard VPN configuration

Programming Skills
-Data scraping / processing in Python
-Self-hosted VS Code server for hobby projects
-Data analysis in R-Studio
-Matlab mechanical models
-Matlab Simulink control systems
-Excel VBA models
-Excel data solver / regression / simulation analysis