Julien Delvingt

Technical Lead in Automation

contact@julien-delvingt.be

+33 472 33 65 23

Brussels, Belgium

linkedin

Professional Profile

Engineer passionate about driving digital transformation through operational technologies in industrial environments. Specialized in process control, supervision, and advanced analytics to optimize production performance and minimize costs. Over 5 years of experience implementing Industry 4.0 solutions that enhance control systems, improve operational efficiency, and support continuous innovation.

Languages

- French ●●●●●
- Dutch ●●●●●
- English ●●●●●

Areas of Expertise

Enterprise Level

Factory Digitalization

Design and deployment of integrated digital solutions to transform traditional factories into connected factories of the future. Leveraging industrial data to create added value.

Digital Twin | Big Data Analytics | Cloud Manufacturing | MES | AI & Machine Learning

Supervision Level

SCADA & HMI

Development of ergonomic human-machine interfaces and supervision systems allowing real-time control of industrial processes. Collection and visualization of production data.

Control Maestro | WinCC | SCADA Server

Field Level

PLCs & Process Control

Programming of industrial PLCs and implementation of reliable and high-performance process control solutions. Design and implementation of automation logic.

Siemens TIA Portal | Schneider Electric | Instrumentation | Electrical Design

Professional Experience

Automation Engineer

Etex, Worldwide

2022 - Present

- Optimized thickness control in fiber cement production using advanced process control and machine learning, resulting in significant cost reduction and improved product consistency.
- Led the development of a centralized control room for a raw material preparation hall, including the deployment of a SCADA server, six control stations, and an integrated batch control system to enhance real-time monitoring and operational efficiency.
- Program development of a thermal energy storage unit to recover batch heat from autoclaves and enable continuous redistribution of thermal energy across factory consumers, enhancing energy efficiency and reducing overall utility costs.
- Revamped legacy electrical cabinets to align with the latest factory standards, including PLC reprogramming and SCADA system development to enhance reliability, maintainability, and system integration.

Advanced Process Control | SCADA Server | Machine Learning

Project Engineer

Etex, Worldwide

2021 - 2022

- Engineered autoclaving stations, including the development of equipment lists, dimensioning of process components, preparation of technical specifications and tenders, and creation of P&IDs to support procurement and detailed design
- Designed and developed an energy storage system to optimize thermal energy management, supporting process stability and improving overall energy efficiency in industrial operations.
- Designed pneumatic control cabinets in compliance with the latest safety standards, ensuring reliable operation, system integrity, and adherence to industrial safety regulations.

P&ID | Tender | Safety

Master thesis

Siemens Digital Industries Software

2019 - 2020

- Conducted a study on the effect of inverter control laws on the vibration behavior of an induction (asynchronous) motor.
- Tested and identified the motor's electrical and mechanical characteristics through experimental methods.
- Modeled the induction motor and inverter, simulating their dynamic behavior for vibration analysis.
- Programmed the inverter from scratch, implementing a custom control algorithm.
- Isolated and analyzed the inverter's influence on motor vibrations to support noise and reliability optimization.

Control | Matlab Simulink | Assynchronous Motors | Variable Frequency Drives

Internship

CETIC

2019 - 2019

- Contributed to a project focused on smoothing electrical grid load by predicting household energy consumption patterns.
- Analyzed and generated performance statistics of predictive models across diverse user profiles to evaluate accuracy and reliability.
- Utilized Python extensively, strengthening proficiency in data analysis and relevant libraries to support project goals.

Python | Machine Learning | Prediction Models | Big Data

Education

2020

Industrial Engineering with specialization in Automation

ECAM Brussels Engineering School

Specialization in Mechatronics, Robotics, and Automation Engineering

Certifications

PMI Training

ACTIVE

Xenturion

2026

Project Management CAPM® / PMP® Basic Course.

Project Management

ACTIVE

Qualified BA5

Grade ES

2023

Electrical safety training course BA5.

Electrical Safety

ACTIVE

CMSE®

TÜV Nord

2022

Certified Machinery Safety Expert.

ISO/IEC 27001:2013