SUMMARY OF EXPERIENCE

I am an electrical engineer who has worked in the instrumentation, automation and electricity fields since 1988. I have acquired experience as plant engineer, consulting engineer, commissioning engineer, design engineer, trainer and technical representative in different industrial sectors. My extensive expertise allows me to have a global perspective of all project phases. Throughout my career, I have occupied different positions in various engineering projects.

TECHNICAL KNOWLEDGE

• Operating system, Databases, Computers, Servers, Virtualization, Cloud Computing

Windows, Unix, Linux, X-Windows, Oracle, MS-Access, SQL Server, Google FireBase/FireStore, MongoDB. VMWare, Virtual Box, Docker Image/Containers. Google Cloud Platform: Cloud Functions, Cloud Run, Cloud Build , Cloud Vision, etc.

Networks, Switches, Telecommunications, Structured Cabling, Telephony

Ethernet TCP/IP, Allen-Bradley EthernetIP, DH+, DH 485, RIO, DeviceNet, ControlNet. Modicon Modbus Plus, Modbus TCP, Profibus DP, Profinet, ASI. Cisco Catalyst Family, Cisco Nexus Family, Cisco GNS/3, Hirshmann - RuggedCom Switches RX5000, RX1501. Panduit, Hammond Server Cabinets, PDU and UPS Liebert. CableSolve CMS. Belden IBDN System 2400. Corning Fibers Systems. PBX, Avaya CS1000 Phone System.

Building Automation, Fire alarm and Access Control

LENEL OnGuard, LENEL interface modules, HID card readers, Pelco analog and IP Cameras, DVR, Genetec Omnicast VSS, Panasonic, Axis IP Cameras, Simplex-Grinnell, C-Cure 9000, SG True Station, I-Star and Edge Access control panels. Fire Alarm Panels 4010U, 4100U and 4020 Family. Fibers and Copper Fire Communication loop.

• General Programming Languages, CAD, BIM software, IOT and development platform

Pascal, C, Grafcet, Ladder, function blocks, IEC 1131. SQL, HTML, XML, ASP, ASP.NET, IIS, Apache, Visual Studio.NET. AutoCAD, AutoCAD revit MEP, EPlan, Visio. Adobe Acrobat, Blue Beam Studio, JavaScript, HTML, CSS. After Effects, Arduino, ESP32, MicroPython, Arduino IDE.

Programmable Logic Controllers and related software

Allen Bradley Families, SLC-500, PLC5, Controllogix, CompactLogix, 6200, PLC-5 Ladder Logistics, RS-Logix 5, 500 and 5000, RS-Linx. Siemens S7-300 Family, ET200, Step 7 Software. Modicon Quantum, M340 family with Schneider Electric Unity Pro software.

HMI, SCADA, OPC Server, Clients and Historians

Rockwell Software FactoryTalk SE and ME, RS-LINX, PI, Process Book, Wonderware, Intouch, Archestra, Application Server, Access Anywhere, OPC DAS Server, RMC.

Distributed Control System

ABB-Taylor MOD 300, ABB-Masterpiece, ABB-ADVANT. DCN Communication Ring

Line and Motor Protection Control

Schneider-Electric Tesys-T, GE-Multilin, ION 8650C Meter, Schweitzer acSELerator RTAC, SEL-421, SEL-351, SEL-2240 Axion, SEL-3530 RTU, SEL-3610 Port Server, etc.

YEARS OF EXPERIENCE

25+ years

PROFESSION

Electrical Engineer

CONTACT INFORMATION

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LinkedIn : ca.linkedin.com/pub/pierreroy/29/711/9a8

LANGUAGES

French, English

FIELD OF EXPERTISE

- Automation, Instrumentation and Controls
- Programming, Training
- · Commissioning and Start-up
- Industrial Networking
- Industrial & Building IT
- Site Engineering
- Design Engineering
- Project Management
- Team Management and Supervision

FORMATION

- 1986 Bachelor In Electrical Engineering, Laval University, Québec, Canada
- 1981 College Diploma, Applied Sciences College Shawinigan, Shawinigan Québec, Canada

CONTRIBUTION TO INTERNATIONAL PROJECTS

- USA
 Egypt
 New Zealand
 Qatar
- Taiwan
 South Korea
 Malaysia

EXPERIENCE

The company provide web tools to simplify and improve the efficiency of your project, commissioning, startup, operation and maintenance of your plant or business. We also provide control engineering services for electrical and instrumentation and controls for industrial, commercial and residential customers.

Progesys – Electrical, Instrument and Automation Engineer,

My role is the pre-commissioning and commissioning of the electrical, instrumentation and controls of the McInnis Cement project in Port-Daniel-Gascons, one of the most important industrial projects currently under development in Canada, the project current budget is \$1.2 B. This project is based on Rockwell Software (Allen-Bradley) technology.

Axium -Symbotic - Electrical Installation Manager,

Symbotic's develops disruptive robotic solutions for warehouse automation and supply chain transformation. They have clients such as Coca-Cola, Wallmart and Giant Tiger. My role was to supervise day to day operation of 3rd party electrical contractor for warehouse automation in a high automated environment.

Voith Hydro - Electrical - Automation site engineer (contract),

Nalcor Energy Power Generation – Churchill Falls, Canada December 2015 – April 2016

Site engineering and support of a new automated system designed by Voith Hydro after the handover of Unit 2 (500 MW turbo generator) until the unit has made it through its first GWAC (Guaranteed Winter Availability Contract) between Nalcor Energy and Hydro Quebec. The Churchill Falls Power House can produced up to 5 TW of Energy and consist of 11 hydro turbines of 500 MW each. The system is based on Schweitzer technology and Rockwell Automation technology.

Stantec - Electrical - Automation engineer (contract),

Solar Farm Power Generation & Transportation Projects - Montreal, Canada......July 2015 – February 2016

Cochrane Solar farm project, Ontario, Canada:

Commissioning of a class 3, 30 MW ground-mounted photovoltaic solar project substations in the town of Cochrane, Ontario, Canada for Northland Power's. This project is based on Schweitzer technology with Emerson SCADA system.

AMT public transportation (Train) - Ventilation and Power distribution upgrade, Montreal, Canada:

Design engineering for a new automation system for smoke extraction of a 5 KM tunnel under Royal Mount and system upgrade for new automated disconnect switches for the train power distribution along the rails. This project is based on Siemens and Wonderware technology.

Pierre Roy Electrical Engineer - Resume

TATA Steel - I&C, Electrical Commissioning Engineer (contract),

Direct Ship Iron Ore Project (DSO) - Labrador, Canada Dec 2014 - July 2015

Responsible for providing support to the instrument, control and automation side during the construction phase. Precommissioning, commissioning & startup of the DSO plant. TSMC is developing the Direct Shipping Ore (DSO) project which involves mining, crushing, washing, screening and shipping the sinter fines and pellet fines to Tata Steel's European steel making facilities. Installation and commissioning of the fibers optics cables and the corporate network. This project is based on Schneider Electric and Wonderware technology.

Gbit Logistics - IT & Telecom Engineer

Design, installation and construction of the IT and Telecommunication infrastructure for the new CHUM hospital project. The University of Montreal Hospital Centre (CHUM) is reportedly the largest P3 project in North America. Located on a downtown site in east Montreal, CHUM will occupy more than 2 1/2 city block. All the Telecommunication infrastructure is based on Belden System 2400 Cabling Management System.

Progesys - I&C, Electrical Commissioning Engineer

Vale Malaysia Minerals Project (VMMP) - Lumut, Malaysia...... Nov 2013 – Aug 2014

My role is the pre-commissioning and commissioning of the electrical, instrumentation, telecom and controls of the iron ore stockyard equipment, facilities and port equipment located at Teluk Rubiah in Lumut, Malaysia, the client is Vale Brazil, the project initial phase budget is \$1.4B. This project is based on ABB technology.

Bechtel - I&C, Electrical and Telecom Engineer

Rio Tinto Alcan (RTA) - Kitimat Aluminium Smelter Project - British Columbia, Canada...... Aug 2010 - Nov 2013

Responsible for the installation of network switch and server cabinets, including all the fiber optic and copper cables. The upgrade of the telephony system from analog and digital technology to VoIP with Telus, the upgrade of the access control system and surveillance cameras with Omnicast and Panasonic, the fire alarm detection system with Simplex Grinnell. The Kitimat project is a \$4B project including brown field and green field works.

AXOR - Electrical Engineer, Construction Site Supervisor and Coordinator

Site supervisor and coordinator for the electrical installation of a train car dumper from Metso, building automation for the administration building belonging to an Iron Ore shipping terminal facilities, including also the stacker reclaimer and the conveyors system a contract of around \$150M. Iron Ore will be shipped to China.

SNC-LAVALIN International – Electrical, Instrumentation & Controls Engineer

Qatalum project Aluminum Smelter, Qatar Petroleum/Hydro Corporation - Mesaieed, Qatar...... Jun 2009 - Mar 2010

Electrical, automation and telecom engineer for the installation of a complete access control system including video surveillance for site and buildings, design and integration of all the operator consoles and workstations in the control room including all the power requirement for the control room. Installation of the servers, workstations and telecom equipment in the server room. Also responsible of the link between the server room and the control room using KVM technology cabling. The Qatalum project is a \$4B project green field works.

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SNC-LAVALIN Pharma - Electrical, Instrumentation & Controls Engineer

Berna Biotech Corporation, Vaccine Manufacturing Facility – Incheon, South Korea...... Aug 2008– May 2009

Electrical, automation engineer for the construction, commissioning and validation of a \$150M hepatitis A&B vaccine manufacturing facility. Supervise the installation on site, the installation is executed by Daewoo Corporation Korea. Learned about the installation standards in Asia.

SNC-LAVALIN Pharma - Electrical, Instrumentation & Controls Engineer

Electrical, automation engineer for the construction, commissioning and validation of a \$100M influenza vaccine manufacturing facility. Supervise the installation on site, the installation is executed by Ecotek Corporation China. Learned about the installation standards in Asia.

TAFISA CANADA, Lac-Megantic, Quebec, Canada

Management of five I&C technicians, as well as a dozen electricians. Supervision of the plant's automated systems - a park of approximately 38 industrial computers, industrial communication networks including around ten Ethernet switches, a park of about 45 PLCs, data acquisition systems and plant instrumentation. Maintenance and production intranet network design project. Electrical Engineer for the line 2 reconstruction project (\$150M project)

DANONE CANADA, Boucherville, Quebec, Canada

Management of five I&CV technicians and electricians. Electrical operations supervision in the maintenance department. Instrumentation and control. Plant improvement projects. Acquisition of good knowledge of food processes, notably pasteurization, ultra-filtration, batching and chilling. Learned also about milk, cream and paste-fruits processing. Clean In Place (CIP) techniques with water, acid and Caustic cleaners and double-seat valves principles use in food industry. The system is based on Schneider Electric and Wonderware technology.

SIDEL, Laval, Quebec, Canada

Performance of user interfaces (SCADA) communicating with different production line machines and with the central relational database to manage production cut-off causes. Participation in the PLC programs modification project, the modification of the client database, the implementation of a data acquisition system for all possible production cut-off causes, and the start up of a batching and pasteurization system for McCain's HiC fruit juices located in Kalamazoo, Michigan, USA. Most of these project used Rockwell Automation technology.

MERCK FROSST CANADA, Kirkland, Quebec, Canada

Integration of industrial process control computer systems. Batch control, solution transfer, granulation and coating control. Acquisition of good knowledge of pharmaceutical processes (validation and qualification, system life cycles, etc.). Maintain and aim for the continuous improvement of different control systems: SCADA, HMI and PLC on remote I/O and ethernet networks

ENVITECH INC, Ville St-Laurent, Quebec, Canada

Performance of energy management automation projects and supply systems in metallurgy plants in Cairo and Alexandria in Egypt. Project management (successful pilot project in Egypt, others followed). Configuration and programming of PLC, SCADA and HMI on an industrial network using power monitor units to measure the electrical consumption.

ABB, Ville St-Laurent, Quebec, Canada

In-house training, as well as training for different ABB clients across Canada and the USA, on ABB DCS products. Technical support for clients & Projects. Service calls & Projects. Projects with the Engineering Group for applications varying from pulp and paper to waste water treatment

1989-1991 GE Appliance (CAMCO), St-Léonard, Quebec, Canada		
Plant Project Electrical Engineer	1989 -	1991
Launch new projects. Programming and start-up of an automated test line for dryers, each having its own electrical	control	panel

Launch new projects. Programming and start-up of an automated test line for dryers, each having its own electrical control panel controlled by a PLC and user screen indicating the manipulations that must be performed to test the machine. Feasibility studies of a new electronic washer based of Fisher Paykel technology in New Zealand.

GUILLEVIN INTERNATIONAL, Ville St-Laurent, Quebec, Canada

Answer client's questions and give adequate advice and counselling on the industrial automation field. Give training sessions on PLCs (notably at ALCAN Jonquière, Abitibi Price, etc.) and on user interfaces (workstations and data acquisition systems). Trained companies on GE PLC family and Wonderware SCADA software

LÉVIS-LAUZON COLLEGE, I&C Department, COLLEGES Shawinigan and Limoilou, Quebec, Canada

Teaching in the digital and technical electronics field on computerized systems, specifically circuits based on a microprocessor, interfacing between an electronic circuit and a D/A, A/D converter computer. Courses in logic circuits, linear circuits, computer science, Z80 Assembler, Pascal language. Courses on computer peripherals such as video controller 6845, characteristics of printers and their stepper motors, the microcontroller 8051, the image tube (CRT), floppy and hard disks, principles of the television, laser printer, brushless D.C. motors; DMA techniques with the 8237 controller, etc.

CAREER	HISTORY
2017 - Now	DasDune Techologies - Owner
2017 - 2017	Progesys - Electrical, Instrumentation, Controls Commissioning Engineer
2016 - 2017	Axium-Symbotic - Electrical Installation Manager
2015 - 2016	VOITH HYDRO - Consultant, Site Automation Engineer
2015 - 2016	STANTEC - Consultant, Automation Engineer, Commissioning
2014 - 2015	TATA STEEL - Automation, IT & Telecom. Engineer, Commissioning
2014	GBIT LOGISTICS - IT & Telecom. Engineer
2013 - 2014	PROGESYS – Malaysia - Site Electrical & Automation Engineer, Commissioning
2010 - 2013	BECHTEL - Electrical & Automation Engineer, Commissioning
2010	AXOR - Site Electrical & Automation Engineer, Commissioning
2009 - 2010	SNC LAVALIN – Qatar - Site Electrical & Automation Engineer, Commissioning
2008 - 2009	SNC LAVALIN – Korea - Site Electrical & Automation Engineer, Commissioning
2008	SNC LAVALIN – Taiwan - Site Electrical & Automation Engineer, Commissioning
2000 - 2007	TAFISA CANADA - Lead Electrical, Instrumentation & Controls – Projects and Maintenance
1999 - 2000	DANONE CANADA - Lead Electrical, Instrumentation & Controls – Projects and Maintenance
1998 - 1999	SIDEL - Site Electrical & Automation Engineer, Commissioning
1996 - 1998	MERCK FROSST CANADA - Process Automation Engineer
1995 - 1996	ENVITECH – Egypt - Site Electrical & Automation Engineer, Commissioning
1991 - 1995	ABB - Electrical and Automation Engineer & Trainer
1989 - 1991	GE APPLIANCES (CAMCO) - Electrical Project Engineer
1988 - 1989	GUILLEVIN INTERNATIONAL - Technical Representative & Trainer
1985 - 1988	COLLEGE LÉVIS-LAUZON - Teacher