

YAN BELLAVANCE

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CAREER PROFILE

In 2006, while finishing college, I was writing my final year research paper on quantum dots for a photonics class. I also had the opportunity to do research in holographic storage media technology. Best subjects I could ever hope for before moving on to the real world! As you can see, I originally came from a more hardware/physics engineering branch of academics:

Technologist degree in telecom electronics (3 years)

Bachelors of Electronics Engineering (4years inc. 3 master's courses)

But all this hardware logic and science had 1 goal and that was to support the software. Ever since the beginning of my schooling I made sure to push myself to become a great programmer. I have software written in Qt that runs at a couple of NASA bases and the us airforce. The Alpha version had 0 bugs, it was a first for them.

After 12 years out of school, looking back, school looked tiny in comparison with everything I learned in the corporate world and self involvement afterwards.

Whether its algorithms, signal processing, optimizing, writing drivers, high level, low-level, whatever is challenging that I can resolve to make a project go smooth and be successful keeps me happy and I love my work so it's not always work:) path or not. In either case I like your pitch. I recently acquired experience in cloud computing and have done some HPC on FPGA, GPU.

In regards to support, well I always seem to have the customer on my side and in regards to teamwork well I hope to be a key player anywhere I work with keen interest in leadership opportunities

TECHNICAL QUALIFICATIONS

VB .NET, scripting, Agile, Ant, API, Architect, Automation, C, C++, Canvas, CGI, CodeWarrior 6.x, Hardware, CSS, Customer Support, debugging, LCD, layout, Documentation, DOORS, Edge, Embedded C, Embedded systems, Ethernet, Fortran, Frame, GUI, Hardware design, HTML, Image, IP, Java, Javascript, LAN, leadership, Linux, MVC, natural, Enterprise, Network, OpenGL, page, PLC programming, Programming, coding, Prototyping, Python 3, Python, Read, Proxy, Siemens, software design, Software Development, strategy, TCP/IP, Technical Support, type, UML, USB, Validation, Verilog, video, VB, Visual C++ 6, vm, VxWorks, web site, website, XML, XSLT

EXPERIENCE

10/2016

Lead Engineer

HLRT Solutions — Saint-Hyacinthe

This is my self-employed company I use for consulting, contract work, R&D and career building.

web

automation

green technology

Harm Reduction technology

Education technology

Embedded Systems, Electronics
Firmware, Software, Webware, ShareWare
Android, Linux
Cloud, Artificial Intelligence, Machine Learning
High Performance Computing, Financial Technologies
Encryption, Artificial Vision, CryptoCurrencies.

Projects completed, available for consultancy or permanent positions but only if the challenge is great and fits me!
I am a loyal and ethical worker.

05/2016 — 10/2016

Senior Software Engineer

Marcotte Système Itée — Longueuil

- R&D, improve and debug web(back end and front end) and desktop application used in batching control automation product.
- Developed web reports, Back end processing, wrote a driver for a moisture probe, participate in brainstorming Port code Optimize code, Remove bad coding practices and replace with optimum natural coding solution: web site was laggy, used a lot of processing, had layout issues, and patches in the code that made the main thread work excessively overtime for nothing.
- convert html page style and layout for print HTML5 Canvas (flot-canvas) web dev task highlight: A) Take website built only for Edge browser maximized B) WebReports needed to be printed but were never designed to be.
- Company written javascript had serious bugs that I was key in resolving
- prepping layout of web pages for printing
- C/C++, Javascript, jQuery, XSLT, HTML5, CSS, CGI, XHR.

11/2015 — 04/2016

Firmware Engineer

Bombardier — Saint-Bruno

- Part of the TCMS team, I was tasked with the maintaining of front end and back end parts of the web PTE, a web application used to monitor train systems.
- My functions included: modifying the code to match requirements, debugging back end and front end code mentioned below.
- Bring code up to standards, make it more readable to the user, simulate real environment on a vm using all web technologies.
- UML analysis and generation using Enterprise Architect.
- Back end S/W: C++, Python, XML
- Front end S/W: Javascript, jQuery, html, css, mvc, lighttpd
- Documentation: learn, follow, update and add Software requirements, design document and interface control documents.
- Use Enterprise Architect to document the software design.
- Compile Doxygen
- Achievements: I was the most productive developer in my team and cleared away many bugs that had been present for a long time.
- The code I developed was regarded as excellent, easily readable and usable.
- Competences: I demonstrated a lot of autonomy, ingenuity, and leadership.

07/2015 — 10/2015

Firmware engineer Consultant

Tamaggo — Montréal

- Qualcomm Snapdragon 810 platform
- Wi-Fi (hostapd, ath6kl, 2G/5G, nl80211, cfg80211, wext)

- HS/SS USB (type-C)
- Linux driver debugging
- Add support for Python on android arm64
- Test scripting writing
- Agile (JIRA)
- Validate Hardware design through schematic inspection.

01/2014 — 01/2015

Software engineer

CMC Electronics — Montréal

- Prototyping Graphical Flight Planner: Visual C++ 6, MSVC 2010 (C++0x)
- C, C++, HTML, Javascript, jQuery, Awesomium
- Software Development, formalisation, testing and support: VxWorks, BARCO Display (PEAF, Honeywell),
- UART
- DO-178, DOORS, VectorCAST
- Ant, Java, Python, C, C++, OpenGL.

01/2013 — 01/2014

Firmware engineer

ALSTOM — Montréal

- Embedded systems programming
- CodeWarrior 6.x, 7.x and 10.x (MCF54451 ColdFire Microprocessor)
- Tasking EDE (Infineon C161RI Microcontroller - Siemens)
- LED matrix display software development and maintenance
- LCD display software maintenance
- Embedded Linux (Moblin)
- Agile Software Development (Rational ClearQuest, JIRA project tracker)
- Software Validation and Systems Validation support
- Hardware debugging
- Use of about 40+ different software in line of work
- C, C++, Assembly, UML, XML, Python 3.

01/2011 — 01/2012

Hardware engineer

Logix Systems — Thousand Oaks, California

- Design of Document Camera
- Hardware and development tools based on the HDR-60 board
- IP Core Design (Verilog):
- Image Frame Buffer
- Frame rate Up Converter
- HDTV format Converter (720p@60, 1080p@60)
- Third Party IP Core Integration:
- I2C, HDMI/DVI, Gbit Ethernet (PHY/LAN), DDR2, USB2.0
- Aptina CMOS sensor Integration:
- Interfaces: Parallel, MIPI, Hi-Spi
- Control and Status: I2C Lattice mico32 soft core processor in FPGA:
- Write TCP/IP stack
- Write UDP based protocol development framework
- Wishbone interface implementation on Custom mico32 IP cores
- RAW video data LAN transfer
- C, C++, Verilog, UML
- Implementation strategy, Read-write lock patterns.

01/2009 — 01/2011

Software Engineer

WV communications — Newbury Park, California

- FTS (Flight Termination System) lead developer and senior designer
- Interface with Company Lead Designer to spec the FPS (FTS Programming System):

- GUI development (Qt Framework and libraries)
- Employee and Customer Support
- AVR microcontroller based Device:
- Program AVR microcontroller
- Debug Hardware Prototype design (PCB, Assembly) C, C++, Assembly, VB .NET

01/2008 — 01/2009

Integration Specialist

CAE - Montréal, QC

- Employed in the department that updates existing flight simulator
- Integration of Software Updates on Linux platforms
- Technical Support for Customers and engineers
- Fortran avionics debugging

01/2006 — 01/2007

Systems Analyst

Marcotte Systems — boucherville

- Integration/management of turnkey Automated Batching System.
- C++ Desktop app programming.
- PLC programming (Omron, Allen-Bradley)
- C, C++.
- control systems and automation

05/2005 — 09/2005

Embedded Software Engineer (Student Internship)

Agro-Contact — Princeville

- Design Automation Software for Batching and Feeding System.
- GUI and Machine/Machine Interface Development
- Embedded C programming of Rabbit based Control System
- Network Layer development.
- Rabbit processor, Qlarity Hardware (HMI terminals)
- Dynamic C, Qlarity Language (similar to VB)
- Abstract Factory, Prototype design patterns.

FORMATION

2006

Bachelor of Electrical Engineering

École de Technologie Supérieure — Montréal QC

Electronics Engineering - Information Technology

2000

DEC Technologue

Collège de l'Outaouais — Gatineau Canada

Electrical Engineering - Telecommunications

INTERESTS

- Writing
- Research
- Rollerblade
- God
- Movies
- Music and audio