Jérémie Plante

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LinkedIn

▷ **Polyglot :** Asm, Bash, C, C++, C#, Clojure, Elixir, Erlang, Go, Java, JavaScript, Lisp, Lua, Python, Rust, Zig

Professional experience

▷ **Maker** DDD.engineering

(2020-2021)

▷ **Consultant**   (DevOps, Embedded Systems, Full Stack, IoT & Mobile) Sineer

(2007-2021)

▷ **Embedded / Network Software Designer** NuRAN Wireless

(2019-2020)

R&D of NuRAN's new LiteRAN xG ; a 2/3/4G cellular base station.

— Architect xG controller board's real-time networked embedded C software.
— Assess MicroChip vs TI : SAM E vs MSP432, MPLAB vs CCS, FreeRTOS vs TI-RTOS, lwIP vs NDK, …
— Test-driven development of HAL for various bus, sensors and power-up sequences of the xG-1 controller board.

▷ **Functional Software Developer** Genetec

(2017-2018)

Design and prototype StratoX ; a IoT platform written in Erlang.

— Develop Screw ; the FreeBSD Erlang OTP Supervisor to boot the OS and monitor jailed processes.
— Program a Modbus plugin for Genetec Security Center using Erlang, C#, RabbitMQ and Protobuf.
— Setup Gitlab CD/CI pipelines within Kubernetes to achieve model driven stateful testing of finite state machines.

▷ **Embedded Linux Software Developer** Schneider Electric

(2014-2015)

Part of a large team of agile developers working on the Wiser Air Wi-Fi Smart Thermostat.

— Design system control logic to drive HVAC equipment such as air conditioners, heat pumps and furnaces.
— Implement smart thermostat logic with many unit and system tests in Lua and do plenty of code reviews.
— Debug low level C code on ARM/Linux ; POSIX thread management, mutexes, conditions and timezones.
— Learn Qt Quick to develop the HMI Framework ; QML components used to create the Wiser Air touch UI.

▷ **DevOps** Videri

(2014)

Jenkins CI for Android, iOS and Linux apps on AWS (EC2/Eucalyptus, ELB, OpsWorks, S3) using Chef and Docker.

▷ **Node.js Software Developer** EXO U

(2013-2014)

— Rewrite the EXO Admin PHP backend in JavaScript using Express.js, MongoDB and MySQL.
— Develop a full stack solution to manage Active Directory users with LDAP, SASL and AngularJS.
— Use Backbone, Socket.io and Sails.js to develop a server monitoring web app similar to New Relic.

▷ **Embedded Software Developer** InnVue

(2010)

CIBC (Communication Interface Box Controller) and CIBs ; video on demand on coaxial network in QAM.

— Program a real-time "RF" application for ColdFire microcontroller to control the CIBs and the CIBC.
— Automate production testing in Python with MSSQL for complete tracking of each unit (CIB/CIBC).

▷ **C++ Software Developer** Cooper Power Systems

(2008-2009)

Enterprise Gateway ; a SCADA scalable front-end processor and data concentrator.

▷ **Firmware Developer** Optosecurity

(2006-2007)

Optoscreener ; a weapons and liquid threats detection system.

— Program a Linux driver in addition to an API for a CompactPCI I/O Accelerator (PLX 9056).
— Code watchdogs, DVI, I2C, UART and PWM interface drivers for PC (Linux) and MicroBlaze.
— Setup and maintain the continuous integration system and the Debian GNU/Linux baseline.

▷ **Firmware Developer** **Lyrtech RD**

(2005-2006)

Develop BSPs (Board Support Package) together with SDKs for LSP (Nutaq) multi DSP/FPGA platforms.

▷ **Firmware Designer** **Zucotto Wireless**

(2000-2002)

Implement KVM virtual machine on the StrongARM and Xpresso ; a wireless Java (J2ME) SoC.

STUDIES

▷ **Bacc. en Mathématique** (2 semesters) Université de Sherbrooke

(2004-2005)

▷ **Bacc. en Informatique** (2 semesters) Université Laval

(2003-2004)

▷ **Java programming language workshop** Sun Microsystems

(Summer 2001)