

Julio Paton

SOFTWARE ENGINEER

Holyoke, Massachusetts

☎ (413) 472-9082 | ✉ julioapaton@gmail.com

Summary

C++ Senior Software Engineer with 8+ years of experience has led teams to deliver critical applications in international projects. Motivated to continue to learn and grow as a professional and to help other team members to achieve their full potential. Prior experience in Qt, Linux and embedded platforms and expertise in all aspects of the software development lifecycle.

Work Experience

Tecnobit (Tactical Communications Department)

Valdepeñas, Spain

SENIOR SOFTWARE ENGINEER

Apr. 2021 - Nov. 2022

- Development of a Tactical Data Link processor, a multi-threaded Linux application using modern C++, unit testing and design patterns.
- Development of a Combat Management System (CMS) using QT and Luciad (GIS).
- Plan, organize and monitor tasks of the software development team. Mentoring of new members.
- Integration of communications systems such as network controller, modem, radio, GPS, NTP server, radar and cryptographic devices.
- Device integration through different interfaces: MIL-STD-1553, RS-232, RS-422, Ethernet and Moxa devices.
- Expertise in static and dynamic analysis tools such as Clang-Tidy, Cppcheck, AddressSanitizer and Valgrind.
- In-depth use of modern C++, STL, Boost, Qt, GoogleTest, TCP/IP communications and multi-threading.

Tecnobit (Optronic Systems Department)

Valdepeñas, Spain

SENIOR SOFTWARE ENGINEER

Jan. 2020 - Mar. 21

- Embedded software design and development in C/C++ using Xilinx SDK for Zynq board.
- Remote and on-site support to client.
- Controlling interfaces such as GPIO, I2C, UART and Ethernet.
- Customization of Yocto image.
- CI of SW components.
- Technologies used include C++14, STL, GoogleTest, Xilinx SDK, Yocto Project and Jenkins.

Tecnobit (Tactical Communications Department)

Valdepeñas, Spain

SOFTWARE ENGINEER

Jun. 2014 - Dec. 2019

- Development of a Tactical Data Link processor, a multi-threaded Linux application using modern C++, unit testing and design patterns.
- Development of a Combat Management System (CMS) using QT and Luciad (GIS).
- Design, develop and testing of Tactical Data Link Systems including Link11, Link16, Link22, JREAP and SIMPLE protocols.
- Network routing through Ethernet, radio and satellite. Technologies used include SNMP, iptables, firewalls, TCP, UDP and multicast.
- On-site system deployment, testing, support and training for navy members on ships, ground stations and aircrafts.
- Sockets programming with POSIX API and Boost.Asio.
- Port a VxWorks Tactical Data Link processor application to Linux.
- Technologies used include C++11 and Qt.

VISILAB Research Group (University of Castilla - La Mancha)

Ciudad Real, Spain

RESEARCH ASSISTANT

Sep. 2012 - May. 2014

- Design and develop computer vision applications for desktop, Android and iOS platforms using OpenCV.
- [Book] OpenCV Essentials, Packt Publishing, 2014.
- [Article] A Vision-Based Localization Algorithm for an Indoor Navigation App, Eighth International Conference on Next Generation Mobile Apps, Services and Technologies (NGMAST), 2014.

Education

Graduate Diploma in Video Games Development

Ciudad Real, Spain

UCLM (UNIVERSITY OF CASTILLA - LA MANCHA)

Sep. 2013 - Jun. 2014

B.S. in Computer Science and Engineering

Ciudad Real, Spain

UCLM (UNIVERSITY OF CASTILLA - LA MANCHA)

Sep. 2007 - Jun. 2013

Erasmus Scholarship

Eindhoven, The Netherlands

TUE(EINDHOVEN UNIVERSITY OF TECHNOLOGY)

Sep. 2009 - Jul. 2010

Visa Status

J-2 visa and EAD card holder valid until 06-30-2025 and extendable for two more years.