# O. VICTOR JOHNS

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## *Summary*

Inquisitive, highly-skilled Senior Software Engineer with over 20 years' experience. Persistent in solving problems; works well with vendors and stakeholders; stays abreast of new technologies. Excellent written and verbal communication skills; able to explain technical concepts in layman's terms.

## AREAS OF EXPERTISE

Chipsets: ARM STM32, i.MX*,Nvidia Jetson (Nano, NX)

Languages: Assembly (ARM Cortex M*), C, C++, python,lua

Tools: make, gcc, gdb, Git, Unix shell scripts in bourne and c shells, OpenOCD based JTAG debuggers, autotools, cmake,

Platforms: Windows, Unix, Linux

Frameworks: OpenEmbedded, Open/WRT, Yocto

RTOS Experience: uCOS-II, FreeRTOS, Embedded Linux, Android

Physical Drivers: TCP/IP, Zigbee, WiFi, CAN, Thread, Zwave

## PROFESSIONAL EXPERIENCE

INDESIGN, INDIANAPOLIS, IN                                     09/2017 – Present
*Senior Software Engineer*
- Key technical member of firmware team.  Develop core technology components across several high visibility projects.
- Continuously improved deployment of Yocto based projects depending on client needs and chipset capabilities within Linux based projects
- Worked on several challenging, resource constrained microcontroller based projects.

TECHNICOLOR, INDIANAPOLIS, IN                                 06/2014 – 09/2017
*Senior Software Engineer*
- Develops and integrates low-level kernel space drivers and user space applications into Linux gateways based on a variety of frameworks for this $10 million Verizon-based project. Collaborates with vendors to resolve issues and bugs identified during development and in the field.
- Assists platform team in investigating and developing proof of concept and production code of customer-mandated communication protocols.
- Developed code for Linux host-based Direct TV Wireless Video Bridge. Using a software Linux-based WVB, reduced system and installation costs by 33%.

TAHU SOLUTIONS, INDIANAPOLIS, IN                             02/2013 – 06/2014
*Senior Software Engineer*

- Managed the specification, architecture, design, and verification of embedded firmware-based solutions for various clients. Projects included measurement acquisition systems, RF devices, and power monitoring solutions on multiple targets/processors.
- Overcame significant design constraint challenges while serving as architect and firmware developer for MOMO data acquisition and measurement system on an STM32-based processor.

SEP, CARMEL, IN                                                                                                              07/2012 – 02/2013
*Senior Software Engineer*
- Provided team leadership for a Wireless Access Control System (WACS), a Zigbee-based access controller system comprised of three main functional components.
- Developed prototype code to demonstrate proof of concept for WACS, writing code for all three major functional components (ZC, ZED, AC).
- Developed production code for Access Card reader module of the AC component, shared serial protocol module used for communications between the ZED and AC, and production code for the ZED.

PRIIO LLC, INDIANAPOLIS, IN                                                                                       07/2010 – 07/2012
*Firmware Engineer*
- Developed wireless communication device consisting of an ARM A-8-based microcontroller to communicate with an RF module via an SPI interface; an AVR RF module to provide proprietary secure wireless functionality; and an LCD module to provide the GUI for user feedback and device operation status.

SW ENG THOMSON MULTIMEDIA, INDIANAPOLIS, IN                                                07/2005 – 07/2010
*Member Technical Staff*
- Developed embedded software drivers for various platforms used in set-top boxes deployed by Thomson Multimedia. Successfully implemented core functionality of several high-profile revenue-producing initiatives.

## EDUCATION

MS Electrical Computer Engineering, IUPUI/Purdue University, Indianapolis, IN – 12/2004 GPA 3.62

BS Electrical Engineering, California State University, Los Angeles, CA – 06/1998 GPA 3.2

## AFFILIATIONS

IEEE (Institute of Electrical and Electronics Engineers)

National Society of Black Engineers