Eric Boyd

Software Engineer & Air Show Pilot

Summary

N/A

Experience

Software Engineer at Apple
2015 - Present

Software Engineer
January 2013 - Present

  Software contracting and consulting, in mobile (iOS, Android, BlackBerry 10) and embedded (BSPs, device drivers, USB, Bluetooth, QNX 4, QNX 6 Neutrino, embedded Linux, macOS kernel extensions, Qt, WebKit) worlds.

Air Show Performer
2012 - Present

  Youngest Canadian air show pilot. Statement of Aerobatic Competency for solo and formation aerobatics at air shows at level 3 (500'). Fourth generation biplane pilot. Soloed at legal minimum age of 14. Youngest pilot to solo the Pitts Special aircraft. Flown with astronauts from the Canada Space Agency, and world aerobatic champions. Member of the world's only three generation (grandfather, father, son) air show team - promotional videos at http://youtube.com/epboyd.

Software Engineer at CodeEdge Inc
May 2012 - May 2015 (3 years 1 month)

  Contracted with QNX Software Systems on an "accelerator kit" demo project, which highlights software working together in a QNX embedded environment: Qt for the UI, various hardware drivers (bluetooth, WiFi, touchscreen, USB), QNX kernel demos (adaptive partitioning and bound multiprocessing), and PPS for communications. Shown at Embedded World 2013.

  Contracted with General Electric Oil & Gas. Patched QNX 6.5 USB to ethernet adapter driver denvp-axe.so to support newer ASIX chipsets, and ported this updated driver to QNX 4.

  Contracted with Abiomed. Ported QNX 6.5 flash filesystem driver devf-generic and flash libraries to QNX 6.3, adding support for Intel Strataflash P33 memory chips.

Software Engineer at Bytown Technology Group
December 2010 - 2012 (2 years 1 month)

Contracted with Hilbert Technology. Remastered a Linux OS, running out of RAM, which surrenders full CPU access (by disabling interrupts) to the heavily computational, x86 assembler-written Hilbert physics engine. Providing C function call-backs for all functions in all present dynamic libraries.

Briefly consulted with Intrepid Control Systems on QNX driver support for FTDI USB to serial chipsets.

Software Engineer at BlackBerry QNX
July 2009 - September 2010 (1 year 3 months)

On QNX's WebKit and Adobe Flash Player engineering team for the BlackBerry PlayBook tablet: Architected and developed location managing daemon. Implemented location API defined features in both Flash and WebKit. Implemented storage for cookies, HTTPS certificates and databases in WebKit. Developed the webpage invoked popup boxes. Removed Flash's dependencies of libraries licensed with the GPL. Contributed to accelerometer driver, harnessing the BMA150 sensor. Implemented accelerometer API defined features into Flash (connecting Flash to aforementioned driver). Supported Electronic Arts developers using the accelerometer. Youngest person to date to reside on the BlackBerry PlayBook engineering team.

Lead Digital Instrument Cluster Developer on QNX CAR: Developed an OBD (On Board Diagnostics) service, that connects to a car and parses real time OBD data (speed, RPM, etc.) through an OBD to CAN bus to USB connection. Reverse engineered over half of the OBD codes used. Developed an OBD simulator, that transmits captured or simulated OBD data to the aforementioned OBD service. Contributed to the Flash based digital instrument cluster, and connected it to the OBD client via QNX's PPS service, forming a functional digital dashboard. Final product was implemented in a Toyota Prius, of which a variant toured electronics shows, including the Consumer Electronics Show (CES). Later implementation on a Porsche won CES best in car tech award in 2012.

Education
University of Guelph
Bachelor's Degree, Software Engineering, Mathematics & Physics

Eric Boyd

Software Engineer & Air Show Pilot

[Contact Eric on LinkedIn](#)