Daniel Dressler   **danieru.dressler@gmail.com**

Linux's IPP over USB driver

Wrote Linux's driver for IPP USB class devices. Contributed patches to system-config-printer for autostart support. The driver, ippusbxd, proxies HTTP between TCP and USB Bulk. Completed in 2014. Shipping in Ubuntu 14.04. Written in **C**.

Developed with the support of Google Summer of Code from May 2014 to September 2014. Linux Foundation sponsored my trip to the August 2014 meeting of the Printer Working Group where I presented upon ippusbxd.

Microsoft Internship

From May 2013 to August 2013 I did an internship within the Windows Sustained Engineering divison, within the Printers and Peripherals team.

During this internship I learned the Windows Development process by guiding backported patches through the acceptance process into Windows 7 and Windows 8.

My primary concern during this internship was the development of the OCASE BCDE project. [B]ulk [C]rash [D]ump [E]xporter features a domain specific non-turing complete language for scripting interaction with the Windows Debugger (Windbg). This is used to generate reports which developers use to analyize specific crash buckets across thousands of crashes.

BCDE was written in **C++11** and leveraged internal Microsoft services for the selection and collection of crash dumps. It generated final results as Excel documents.

Before BCDE developers tested crash theories upon 5 to 10 crash dumps. They did so through time consuming manual operation of Windbg. Now with BCDE developers can test hypothosises against 1000+ crash dumps with a fraction of the effort.

A full time job offer was extended but I declined as it would have precluded coming to Japan.

1x *Microsoft* **Internship working on Windows**

3x **Google Summers of Code on Linux printing**

Did you know I have programmed...

- A game for the original Gameboy in C?
- A FreeBSD rootkit for bonus marks?

- Firefox OS's Out-Of-Memory Killer logcat logging?
- A 3D turn-based-strategy game in javascript?

Other projects

PPSSPP Keymapping (*C++*, 2013)
Restructured the PSP emulator PPSSPP's input path to support key mapping. Required extensive refactoring throughout execution path.

Contract Webdev (*HTML*, 2010-2013)
Developed 10+ websites ranging from marilynmonroe.com, necaonline.com, to eCommerce sites

Foomatic Database Engine (*Perl*, 2011)
Rewrote Linux's printer database generation into Perl, reducing code size by 8K lines. Added SQLite backend. Shipped in Ubuntu 12.04

ExtractZipFile (*C & Javascript*, 2013)
Wrote BlackberryOS10's HTML5 ZIP library. Provides Javascript with interfacing to native C for max performance.

Original Gameboy Game (*C*, 2014)
Wrote gameplay for a shmup running on the original Gameboy. Fought broken compilers to extract modern gameplay on a 1Mhz CPU.

LIBJTAPI (*C*, 2012)
Implemented Free Standards Group's abstract job ticket manipulation. Closely matches Printer Working Group's Semantic Model.

Degree

University of Calgary
Bachelor of Science
in Computer Science
August 2010 - April 2014
Graduated 2014
GPA: 3.38

High School

Graduated April 2010

Address

Sakura House Motohasunuma #210,
45-18 Hasunuma-cho,
Itabashi-ku, Tokyo 174-0052

Work Authorization

Working Holiday Visa
Valid until April 2015
Extendable to October 2015

Work History

GSoC Linux Foundation on ippusbxd (May to September 2014)

Microsoft Internship on BCDE (May to August 2013)

GSoC Linux Foundation on Libjtapi (May to September 2012)

GSoC Linux Foundation on Foomatic (May to September 2011)

Wal-Mart (2008-2010)

McDonalds as Cashier (2006-2008)

Github

https://github.com/daniel-dressler