Lorenzo Stoakes
Curriculum Vitæ

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🖥 | ljs.io

WORK EXPERIENCE

GPU GRAPHICS SYSTEM SOFTWARE ENGINEER, IMAGINATION TECHNOLOGIES

DECEMBER 2016 – PRESENT

My role at Imagination Technologies is to develop and maintain our reference GPU driver, optimise our code, validate hardware and provide workarounds for hardware bugs. I work principally on the kernel mode driver in C.

My work has largely been focused on two areas – driver optimisation and development of our Hypervisor MMU implementation. As part of my optimisation work I was able to reduce time taken in our core code path by 50%.

The Hypervisor MMU task revolves around providing an API for a second-stage MMU, interacting with the hardware team to determine optimal solutions for customers and very thorough testing of both its hardware and software.

SENIOR SOFTWARE ENGINEER, RESIN.IO

MARCH 2012 – DECEMBER 2016

I joined resin.io shortly after it was founded and worked in a number of different roles within the company including hiring, initial development of the on-device supervisor and maintenance of their Linux distribution.

My main focus was on devices – I was part of the team who ported Docker to ARM, I contributed fixes to BoltDB (a dependency of docker) to permit its use on ARMv5 and to the Raspberry Pi userland code to allow GPU usage in a process namespace.

SOFTWARE DEVELOPER, MAPLE SECURITIES UK

JULY 2007 – MARCH 2012

At Maple Securities (a proprietary investment bank) I worked on a number of systems relating to the front and back office using C♯ and SQL Server for assets ranging from stocks and bonds to exotic financial instruments.

GRADUATE SYSTEMS DEVELOPER, PARSONS BRINCKERHOFF

NOVEMBER 2005 – JULY 2007

SKILLS

Languages	C, Go, Bash
Technologies	Linux, Linux Kernel Development, git

EDUCATION

2005	**MEng Civil Engineering**	
	2:1	
	Imperial College, London	
2000	**A-Levels**	
	A – Physics, Maths, Further Maths	
	B – Economics (As)	
	Exeter College, Exeter, Devon	
1998	**GCSEs**	
	3 A, 3 B, 3 C	
	St. Lukes High School, Exeter, Devon	

OPEN SOURCE

See ljs.io/patches for a full list.

LINUX KERNEL   *31 contributions*

I've contributed patches to the memory management subsystem (interacting with Linus himself!), Silicon Motion 750 Frame Buffer chipset driver (SM750FB), Realtek 8192 USB Wifi chipset driver (RTL8192U) and much else.

I also completed the Eudyptula Challenge (less than 1% of people who start finish it) which covers driver development, kernel memory management, debugfs, sysfs, system calls, kernel threads, networking and file systems.

CHROMIUM (CHROME) BROWSER   *7 contributions*

I contributed a fix to correct DOM element FocusIn/FocusOut event behaviour (this issue was capable of causing a browser crash) as well as a number of other fixes.

GO PROGRAMMING LANGUAGE   *4 contributions*

I made contributions to the core Go compiler, most notably allow it to handle recursive types correctly.

REFERENCES

References are available upon request.