3 Camwood Crescent, Ottawa, ON K2H 7X1 (613) 709-1523, bryan@larsen.st

Full stack: from circuit design to CSS. Bootloader to React. Database to Kubernetes.

Career Highlights

- Very early employee or cofounder at 4 startups
- 30+ years of Unix and programming experience
- Video game in assembly language sold to distributor at 14 years old
- 14 function motor controller in 4KB Rom and 53 bytes RAM
- Ported Linux and bootloader to poorly documented Japanese ARM SOC
- Lead maintainer of popular open source web framework
- Bare metal Kubernetes GPU multi-cluster
- Ported git to OSX
- Electronic Engineering degree with distinction.

Over 10 years of experience in each of 3 areas

DevOps

Kubernetes, Docker, GCP, AWS, Webpack, MongoDB, PostgreSQL, MySQL, Redis, Prometheus, Make, Jenkins, SQLite, sh, Bash, Selenium, TCL, Git

Full Stack

React, Typescript, Javascript, CSS, CGI, Ruby, Rails, Node.js, SQL

Embedded

Rust, C, C++, Linux Drivers, U-boot, ARM/68K/8051 assembly, Circuit Design, VHDL

Links

- Stack Overflow
- GitHub
- LinkedIn

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Threekit

2012-2022

Senior DevOps and Software Engineer Online 3D Modelling Software

Ottawa

- Led DevOps team
- Built a multi-site bare metal Kubernetes cluster with GPU support
- Designed core storage mechanism
- Javascript, Typescript, ES6, Node.js, WebGL, V-Ray, Operational Transforms, HTML, CSS, Backbone.js, React, Mongo, Redis, Prometheus, nginx, Ansible, Docker, Jenkins, beanstalkd, statsd, AWS, Vagrant, Kubernetes

Barquin

2009-2013

contractor

NIFA web applications

• Ruby, Rails, Javascript, jQuery, Selenium, SQL, MySQL

Hobo, hobo-jquery

2009-2013

maintainer

contractor

popular open source web framework

- core developer and release manager
- Ruby, Rails, Javascript, prototype.js, jQuery, selenium, SQL, MySQL, SQLite, git

Magor Corporation

2008

Kanata, Ontario

Phone based control panel software

- Javascript, Groovy, Java, HTML
 - JETTY, SIP, Mitel

Lumenera Corporation

Senior Software Engineer

2002 - 2006

Ottawa, Ontario

Ethernet IP Video Cameras

- Solely responsible for software design and implementation based on customer's rough specification and interaction
- Led the team responsible for software maintenance
- Assisted with hardware design
- Designed and deployed initial software design process and infrastructure
- Ported Linux to ARM SOC
- Power on Self-Test design and implementation
- Manufacturing System Test and Customization design and implementation
- Worked with manufacturer to ensure reliable production
- First employee: wide variety of business experiences, including hiring, firing, customer interaction, financial modelling, assembling
- C, Javascript, HTML, sh, Python, ARM & 68K assembler, C++, make
- JPEG, motion-JPEG, MPEG, EXIF, TIFF
- Linux Kernel and Drivers, U-Boot, CGI, XML-RPC, AJAX, Boa (web server), RTP/RTSP, NTP, zeroconf, ActiveX, HTML, XHTML, CSS, Twisted
- Bugzilla, Subversion, TWiki, PyUnit, CUnit, MySQL, Apache

Analog Design Automation (currently Synopsys)

Senior Software Engineer Saskatoon, Saskatchewan and Ottawa, Ontario

Analog Integrated Circuit Synthesis and Optimization Software

- Responsible for initial design and implementation of Parts Library
- Responsible for integration with Cadence Analog Artist
- Led small team in an Extreme Programming development of a Synthesis Prototype
- C++, Python, TCL, CORBA, LISP
- Cadence Analog Artist, SPICE

Vitana Corporation (DBA Pixelink)

Senior Software Engineer

1998 - 1999

Ottawa, Ontario

- ${\it IEEE-1394} \\ \bullet {\it Solely responsible for design and implementation of an embedded IEEE-1394}$
 - Project lead and customer interface for design of airline set top box
 - C, 8051 assembler

Newbridge

Networks Junior Hardware Engineer

1997 - 1998

Ottawa, Ontario

(currently Alcatel-Lucent)

Time Division Multiplexing

- Responsible for implementation of Data Multiplex FPGA and Glue Logic FPGA
- VHDL, Schematic Capture
- \bullet Mentor Graphics

Co-op Jobs for Kipp & Zonen, Ricoh, SED Systems, Environment Canada

• 8051 assembler, C, C++, FORTRAN, Visual BASIC

- Labview, COM, OLE, DLL, MFC, Watcom 4G
- HP-UX, OS/2, MS-DOS, Data General AOS/VS

T&D Software

1987 - 1990

1993 - 1997

Holland, MI

Freelance Designer

Video Games

- Design and Implementation of Video Games
- 6809 Assembler, BASIC

Education

• University of Regina, 1997, Bachelor of Applied Science in Electronic Systems Engineering, Honours