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

## DevOps

Kubernetes, Docker, GCP, AWS, Webpack, MongoDB, PostgreSQL, MySQL, Redis, 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

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

#### 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, 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

- IEEE-1394
  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