

# Marc Sibson

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<http://marcsibson.com/>

## Profile

Problem solving generalist who loves to dive deep. I'm a Software Developer with over ten years experience, including full-stack web development, deploying highly customized Linux distributions, creating distributed highly available systems, down to kernel driver and embedded device development. I have successfully juggled evolving requirements and blended new technologies into robust and elegant products. For my next adventure I'd like the opportunity to contribute to OSS, learn more from my peers and make users happy with amazing products.

## Expertise

### Domains

Concurrent, Distributed, Multi-threaded, Networked, Embedded, Control Systems, GNU/Linux, Cross-platform, Configuration Management, Continuous Integration, Build Processes and High Availability

### Languages

Python, C, HTML, JavaScript, C++, Bash, Make, Java, Lua

### Tools, Libraries, Technologies

Django, AWS, jQuery, Knockout, gevent, memcached, Twisted, Redis, dpkg, Git, Subversion, KVM, Openembedded, Ubuntu, Jenkins, Flask, Ansible, Chef

### Skills

Agile Development, Self motivated, Team player, Strong written and verbal communication skills, Manage conflicting priorities, Excellent time management, Highly organized, Great problem solver, Strong work ethic, Experienced Mentor, Awareness of business needs

## Experience

### Senior Software Engineer, Tindie

*May 2013 - Present*

- Full stack development for an e-commerce website based on Django/JQuery/Knockout/Bootstrap
- Reduced hosting costs more than 60% on AWS infrastructure while improving reliability, performance and maintainability
- Led design and development of accounting, shipping, fraud detection, analytics and image management systems
- Demonstrated ability to work with a distributed international team in a startup environment

# Marc Sibson

## Senior Software Developer, Evertz Microsystems

*April 2008 - May 2013*

- Entrusted with development of new products for entry into existing competitive markets
- Responsible for developing API services, storage, OS configuration and deployment, testing and build infrastructure for an instant replay system while providing design guidance to team members for optimising system for low latency
- Architected a highly available audio and video router control system, consisting of many Twisted services for coordination, pathfinding and clustering. Coordinated with front end teams who created a TG Web front end and physical control panels
- Communicated with customers and on-site support to install, configure and troubleshoot beta installations of business critical systems at major networks including NBC, Fox, MTV and the Olympics
- Mentored junior engineers through coaching, design and code reviews
- Evangelised and drove adoption of new technologies via creation of functional prototypes and developing in house training materials
- Proven work ethic, independence, time management, and communication skills through the timely execution and completion of projects while working remotely with quarterly trips to head office

## Software Design Engineer, Evertz Microsystems

*April 2004 - 2008*

- Identified need for improved processes and introduced CMS tools and policy that became adopted company wide
- Well versed in cross-platform support through development of libraries and build processes targeting Win32, Linux, BSD, OSX and a custom RTOS
- Familiar with 3D graphics pipeline from creation of scene graph based live video renderer prototype
- Managed and developed Linux platform support: x86, Atom and Davinci(ARM)
- Developed embedded applications with Motorola Coldfire, PowerPC and ARM processors including boot loaders and initial bring up of hardware
- Experience with the full software life cycle: requirements gathering, project definition, design, implementation, testing, support, maintenance and hand off
- Designed JSON-RPC like protocol and implemented parsers

## Student Internship, Evertz Microsystems

*April 2000 - August 2001*

- Designed and developed NetBSD frame controller software, VistaLink, to offer multiplexed SNMP/TCP control of USB devices within a chassis. Proven robust and extensible, still actively used by hundreds of Evertz products with almost no maintenance
- Knowledgeable of kernel driver development from creating USB host drivers and bare-metal Coldfire drivers
- Defined SNMP MIBs and implemented using net-snmp dynamic libraries
- Created transaction handler with two phase commit protocol

## NSERC Research Grant, McMaster University

*April 1999 - September 1999*

- Installed, configured and tested an instance of the Amoeba distributed operating system, characterized FLIP vs. TCP/IP, load balancing and network requirements
- Configured and integrated Linux based router/bridge into existing network to support testing of various network topologies
- Created developer, administrative and end-user documentation for the systems
- Furthered independent research, technical and reporting abilities due to minimal available support

# Marc Sibson

## Education

### **B.Sc Computer Science Specialist, McMaster University**

*September 1997 - April 2002*

- Awarded Gerald L. Keech Medal, Dr. R.A. Thompson Prize In Mathematics, University Senate Scholarship (twice), and Dean's Honour List
- Created a real-time, multi-player, networked, cross-platform game engine and multiple games for the senior thesis project.
- Studied Operating Systems, Computer Architecture, Computer Graphics, Data Structures, Software Engineering, Artificial Intelligence, Graph Theory, Linear Algebra and Combinatorics
- Teaching Assistant responsible for running tutorials, grading and electronic support

### **Graduate Studies, Computer Science McMaster University**

*Sept 2002 - April 2004*

- Awarded Ontario Graduate Scholarship
- Completed course work in Human Computer Interface, Combinatorics and Computing, Object Oriented Design, Independent Study - User Interface Tools
- Teaching Assistant responsible for creating assignments, grading, assisting students with questions, offering feedback and guidance for several undergraduate courses