



## SUMMARY OF QUALIFICATIONS

A software developer and systems engineer with hands-on experience in the design, implementation, and support of IT infrastructure including public/private clouds, Linux and Windows systems, and CI/CD pipelines.

## PROFESSIONAL EXPERIENCE

CURRENT	<p><b>Freelance Software Developer, Systems Engineer</b> Software development and systems engineering/administration.</p> <ul style="list-style-type: none"><li>• Ribose, Inc. - Developer CI/CD engineer on various projects<ul style="list-style-type: none"><li>- <a href="#">rnp</a> - a native C/C++ OpenPGP library and tool suite</li><li>- <a href="#">py-rnp</a>, <a href="#">ruby-rnp</a> - FFI bindings for rnp</li><li>- <a href="#">enprot</a> - a confidentiality processor for text and source code files</li><li>- <a href="#">ruby-botan</a> - Ruby bindings for the <a href="#">Botan</a> cryptographic library</li><li>- <a href="#">Botan</a> - various contributions</li><li>- <a href="#">rpm-spec-automake116-automake</a>, <a href="#">rpm-spec-botan2</a> - various RPM specs for CentOS</li></ul></li><li>• Sonata Learning - Assisting with AWS deployments/administration and re-designing for a more resilient production environment.</li></ul>
MAR 2016 FEB 2014	<p><b>Systems Engineer for FEMA (Contractor)</b> <i>Expeditionary Enterprise Engineering (E3)</i> Responsible for administering Linux servers, Apache and Tomcat services, the Hitachi SAN, and Windows servers. Also responsible for imaging/testing GIS laptops to deploy to disaster sites.</p> <ul style="list-style-type: none"><li>• Deployed and administered physical and virtual (ESXi/vSphere 5) RHEL systems.</li><li>• Pro-actively identified and resolved security issues on both private and public servers.</li><li>• Responded to and acted on any security incidents reported by the SOC, assessing severity of threats.</li><li>• Implemented backups, time synchronization, and centralized logging for Linux systems across varying environments.</li><li>• Drastically reduced the time to deploy Windows-based GIS laptops to the field via automation.</li></ul> <p><b>Developer / Cloud Engineer at NEW LIGHT TECHNOLOGIES, INC.</b> <i>Cloud and Virtualization Solutions</i> Responsible for administering the NLT Amazon EC2 infrastructure.</p> <ul style="list-style-type: none"><li>• Designed and implemented a simple web interface for managing AWS EC2 instances using Django, Celery, Redis, memcached (previously), RabbitMQ, and AngularJS. Deployed with Ansible.</li><li>• Designed an Active Directory infrastructure in the cloud with VPN connectivity.</li><li>• Created and administered a developer environment composed of Ubuntu systems in the AWS cloud with xrdp access.</li></ul>
SUMMER 2012	<p><b>Developer on iPXE</b> <i>Google Summer of Code</i> Rewrote the Broadcom NetXtreme II NIC driver for iPXE based on the official datasheet and new Linux bnx2 driver. <a href="#">info</a> <a href="#">repo</a></p>
SUMMER 2011	<p><b>Developer on OPENIMAGEIO</b> <i>Google Summer of Code</i> Wrote plugin for reading Adobe Photoshop PSD files. <a href="#">repo</a></p>
SUMMER 2010	<p><b>Developer on LIBSDL</b> <i>Google Summer of Code</i> Implemented Windows input method support, allowing text input for Chinese, Japanese, and Korean languages. <a href="#">repo</a></p>

# TECHNICAL SKILLS

	Extensive Experience	Moderate Experience	Some Experience
<b>Skill/Technology</b>	Linux (RHEL, many) Ansible Python Django C/C++ Bash Docker AWS EC2/VPC, etc.	Kubernetes Terraform Jenkins Ruby, Ruby on Rails Apache, Nginx HTML,CSS Javascript/ES6/JSX React Rust	Golang, Java CoreOS, FreeBSD AngularJS 1 Google GCE/GKE Microsoft Azure Windows Server 2012 PowerShell Active Directory / LDAP VMware vSphere 5/6

# PERSONAL PROJECTS

- ⌘ BITSEE RUBY  
Ruby on Rails bitcoin blockchain embedded data extractor/viewer.
- ⌘ PASTELY PYTHON,ES6  
An online code paste service using React, Django, Ansible, Docker, and Kubernetes.  
Full CI/CD pipeline utilizing Jenkins and other tools.
- MICRONOTES GOLANG  
Simple microservices-based web application making use of Consul, Vault, Vagrant, SaltStack, PostgreSQL, Cassandra, JWT tokens, and many other tools.
- ⌘ NCTGPIO C  
FreeBSD driver for the GPIO functionality of the NCT5104D Super I/O chip.  
Accepted in to FreeBSD mainline.
- ⌘ FPANELKB C,ASM  
USB HID device firmware for the front-panel of a Speco PC Pro CCTV DVR.
- ⌘ VC0706 C++  
Software to control a VC0706-based JPEG camera via a computer serial port.
- ⌘ MCP23008 C++  
mbed library for the MCP23008 I/O expander. Tested on an LPC1768.
- ⌘ SEAGATE-LEDS C++  
Linux software to control Seagate external hard disk LEDs and query feature information.

# CERTIFICATIONS

- Red Hat Certified Engineer (RHCE)
- Red Hat Certified System Administrator (RHCSA)
- AWS Certified Solutions Architect - Associate
- AWS Certified SysOps Administrator - Associate
- AWS Certified Developer - Associate
- CompTIA Linux+ Network+ A+
- Linux Professional Institute LPIC-1
- SUSE Certified Linux Administrator
- Microsoft Certified Professional (MCP)