



ABOUT ME

I live to learn. I enjoy Systems Engineering, Software Development, Embedded Systems, and many other things. I love to automate things that do not require manual human intervention, and making people's jobs easier. As a hobby I like to work with embedded devices, low-level drivers, microcontrollers, and electronics.

EXPERIENCE

CURRENT	Computer Science Tutor at PARLIAMENT TUTORS Tutoring on the topics of Linux and Python programming.
MAR 2016	Systems Engineer for FEMA (Contractor)
FEB 2014	Expeditionary Enterprise Engineering (E3) Responsible for administering E3 Linux servers, the Hitachi SAN, and some Windows servers. Also responsible for imaging/testing GIS laptops to deploy to disaster sites. Achievements: <ul style="list-style-type: none">Planned and implemented FEMA/DHS central logging requirements for Linux servers.Proactively identified and resolved security issues on public-facing servers.Responded to security incidents reported by the SOC.Mitigated numerous vulnerabilities as reported by Tenable security scans.Analyzed access logs to identify bad requests and block bots typing up resources of DMZ servers.Implemented disk-to-disk backups for most E3 Linux servers.Implemented time synchronization across all E3 Linux servers.Implemented new laptop imaging system with MDT, reducing the time to image laptops by half and reducing human error.
	Developer at NEW LIGHT TECHNOLOGIES, INC. <i>Cloud and Virtualization Solutions</i> Responsible for administering the NLT Amazon EC2 infrastructure. Achievements: <ul style="list-style-type: none">Designed and implemented a web interface for AWS EC2 instances using Django, Celery, Redis, memcached (previously), RabbitMQ, and AngularJS. Deployed with Ansible.Designed an Active Directory infrastructure in the cloud for NLT with VPN connectivity.
SUMMER 2012	Developer on iPXE <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. info repo
SUMMER 2011	Developer on OPENIMAGEIO <i>Google Summer of Code</i> Wrote plugin for reading Adobe Photoshop PSD files. tgz
SUMMER 2010	Developer on LIBSDL <i>Google Summer of Code</i> Implemented Windows input method support, allowing text input for Chinese, Japanese, and Korean languages. repo

OPEN SOURCE PROJECTS

- ⌘ PASTELY PYTHON,ES6
An online code paste service using React, Django, Ansible, Docker, and Kubernetes.
Note: Limited browser support due to use of CSS flexbox. Try modern Firefox/Chrome.
- ⌘ NCTGPIO C
FreeBSD driver for the GPIO functionality of the NCT5104D Super I/O chip.
Committed to FreeBSD.
- ⌘ FPANELKB C,ASM
USB HID device firmware for the front-panel of a Speco PC Pro CCTV DVR.
Support included for the buttons, knobs, LCD, and infrared remotes.
- ⌘ 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.
Involved reverse-engineering some Windows software and some firmware.
- ⌘ SFTTF C++
TrueType font support for SFML.

TECHNICAL SKILLS

	Used Very Often	Used Frequently	Used Occasionally
Skill/Technology	Linux (RHEL, many) Ansible Python Django C/C++ Bash Docker AWS EC2/VPC, etc.	Kubernetes Terraform Jenkins Apache, Nginx HTML,CSS Javascript/ES6/JSX React I2C/TWI, SPI, GPIO	Golang, Java CoreOS FreeBSD AngularJS 1 Google GCE/GKE Microsoft Azure Windows Server 2012 PowerShell Active Directory / LDAP VMware vSphere 5/6

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)