**Carl L Frederick IV**

Analytical and curious Research & Development/Site-Reliability engineer (R&D/SRE) seeking to learn new technologies while improving existing technical skills. I enjoy building scalable systems, tuning performance and discovering or inventing new ways to do so.

**Skills & Accomplishments**

**Disaster Recovery**

Played a key role in buildout of Cvent's newest iteration of its DR environment, which is a 1:1 clone of our production environment.

* Single handedly configured the F5
* Assist/advise in VM deployment and configuration
* Translated environment configuration templates for all Cvent products

**Ruby**

* (Recent) Built a [knife](https://docs.chef.io/knife.html) plugin for GUI-free management of F5 (using REST)
* (Incomplete, but exciting) Building a chef cookbook to manage F5 configurations - I.E. infrastructure as code for F5
* [Designed small daemon to format Pokemon-GO REST API data to be consumed by Splunk](https://github.com/galvertez/pokemon-get)
* Designed and wrote a Gem used to interact with F5 BigIP LTM REST API currently in use at Cvent
* Eagerly seek out new libraries and design patterns
* Strong grasp of Ruby language and the LLVM it is interpreted by
* Numerous custom data collectors for server monitoring in use at Cvent today
* Familiar with rubygems and gem servers

**Python**

* Wrote custom Datadog health checks for WMI
* Numerous small contributions to small pet-projects/hobbyist repositories
* Working knowledge of interpreter and overall language
* Familiar with PIP

**Unix/Linux/BSD systems**

* Strong /bin/bash scripting
* Comfortable in most environments
* Other, more specific proficiencies include, but are not limited to:
  + Kernel: systemd, init.d
  + Networking: ifconfig, ip, route, nmap
  + Disk/Filesystem: LVM, fdisk, mount
  + Packages: yum, apt-get, rpm

**Windows**

* Powershell & scripting experience
* Active Directory
* Basic working knowledge of IIS
* Windows patching: shavlik

**Zabbix SME**

* Scaled Zabbix implementation from monitoring ~1,000 servers/network-devices/etc. to monitoring ~4,500
* Improved overall monitoring qualitatively with custom collectors, app specific monitoring
* Wrote chef cookbook to install Zabbix agent on Linux and Windows

**General**

* RAID
* Networking/routing
* Git
* Chef
* Splunk, Zabbix, Datadog, other monitoring tools
* Hashicorp Vault, Vagrant, Consul

**Experience**

**Cvent Inc.:**

* 10/2016 - Present => **SRE/R&D Engineer**
  + Support Cvent's "Event Cloud"
  + Administer F5 BigIP (SME)
  + Automation and tooling - Chef, F5, Docker, Splunk
  + Buildout, test and support DR (disaster recovery) environment for *all* cvent products
* 03/2015 - 10/2016 => **Internet Operations / Cloud Operations Engineer**
  + Support/troubleshoot compute environments for external customer facing applications
  + Administer Zabbix/Datadog implementation (SME)
  + Administer F5 BigIP LTM (SME in training)
  + Mentor less-senior Engineers
  + Configuration management - Chef
  + R&D - Chef, Docker, F5, Zabbix, Splunk, Datadog, custom automation
  + Automation/scripting - Bash, Ruby, Python
* 10/2014 - 02/2015 => **Helpdesk IT Support Engineer**
  + Support/troubleshoot HQ facility's internal IT systems
  + Support/troubleshoot user (~1000 coworkers at HQ) issues
  + Note: while in this role, I also played an integral part in the deployment of Zabbix as a monitoring solution for use by both sides of the IT organization within Cvent
* 10/2013 - 09/2014 => **Network Operations Center Engineer**
  + Scan monitoring tools for anomalies and alerts
  + Track, track and document incidents
  + Basic SysAdmin requests from developers

**Flowers & Plants Etc.**

* 05/2007 - 10/2013 => **Delivery/Operations**
  + Managed scheduling/delivery of arrangements and installations
  + Ensured smooth day to day operations in the shop
  + Customer service representative
  + IT Support

**Hobbies**

* 09/2010 - Present => **PC Building**
  + Built numerous gaming PCs for myself and friends
  + Built a few machines for business/home use by friends
  + Built a home NAS solution (FreeNAS)
  + Learned a lot about how to build the best machine for the budget

**Education**

* 09/2002 - 06/2007 => **McLean High School**
  + High School Diploma