



# Keurig Dr Pepper (KDRP) Software Co-op

2022 Computer Science Student's 1st Co-op



## About the Company:

- Keurig Dr Pepper is a Fortune 500 company specializing in beverages and associated appliances.
- Below is a picture of the Burlington, MA headquarters. It's a new campus that features an extensive R&D Lab.



## Co-op Description:

- Worked on the Keurig side of the company focusing on commercial brewers
- Worked on the Gemstone platform for the new K4500 brewer (~200k lines of code)



```
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0532] manager: r
fkill: Wi-Fi enabled by radio killswitch; enabled by state file
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0535] manager: r
fkill: WWAN enabled by radio killswitch; enabled by state file
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0537] manager: N
etworking is enabled by state file
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0539] dhcp-init:
Using DHCP client 'internal'
Apr 07 11:29:53 wardah dbus-daemon[469]: [system] Activating via systemd: servic
e name='org.freedesktop.nm_dispatcher' unit='dbus-org.freedesktop.nm-dispatcher.
service' requested by ':1.9' (uid=0 pid=472 comm="/usr/sbin/NetworkManager --no-
daemon" label="unconfined")
Apr 07 11:29:53 wardah systemd[1]: Starting Network Manager Script Dispatcher Se
rvice...
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0580] settings:
Loaded settings plugin: ifupdown ("/usr/lib/x86_64-linux-gnu/NetworkManager/1.22
.10/libnm-settings-plugin-ifupdown.so")
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0582] settings:
Loaded settings plugin: keyfile (internal)
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0584] ifupdown:
management mode: unmanaged
Apr 07 11:29:53 wardah NetworkManager[472]: <warn> [161776993.0594] ifupdown:
interfaces file /etc/network/interfaces doesn't exist
Apr 07 11:29:53 wardah NetworkManager[472]: <info> [161776993.0624] device (lo
```

## Job Responsibilities:

- Wrote a comprehensive wiki that streamlines the onboarding process for future co-ops
- Overhauled their logging capabilities:
  - We now pull info about disk, memory, snap information, and the journal log
  - Keeps a self-regulated running history of all .run file executions
  - Sticks all this info into a tar package
  - Has cloud support so we can get this package on request
  - Has .run file support so we can get this file via a usb stick

-Wrote scripts that streamline the process of adding new lid images to our codebase

-Addressed critical bugs

-Added framework for our switch to a new HMI board due to supply issues

-Onboarded a full-time SW engineer

-And so, so much more

## What I learned (where to start...):

- The Agile Framework
- Bash scripting
- ssh
- MQTT
- JSONs
- Azure
- What a large, multi-purpose code base looks like
- What it means to work in a cross-functional team
- How to communicate effectively (this was huge)
- Greatly increased fluency in Linux & C++

## A Final Reflection:

This was my first co-op, and my experience was absolutely stellar. I felt like I was really integrated into the team and was given meaningful work to do. I gained a fantastic foundation that I will continue to grow off, and I am grateful for the excellent and brilliant people I've worked with.