# Welcome to RITlug!



#### Tristan

- he/him
- 4th year CS major
- I use Arch (by the way)
  - Fedora, Alpine
  - o Previously Manjaro and Debian
- C, Rust, shell scripts, (neo)Vim, ISO-8601/RFC 3339





- she/her
- vice president
- 4rd year CS major
  - Last semester :(
- I use ( Nix OS k
  - Stores applications & settings in config file
- I like cats
  - they are good
  - o i love my cats
  - o i have the best cats





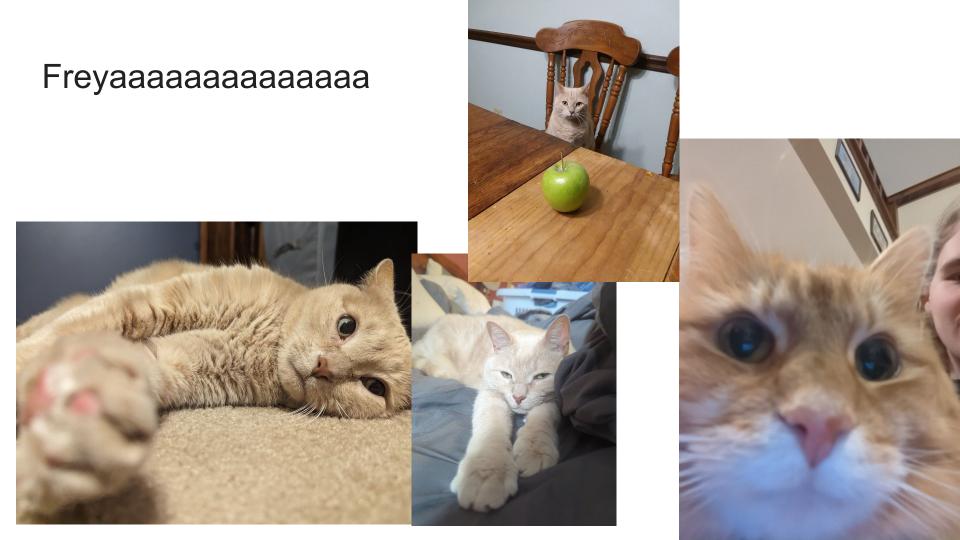












#### Rose

- She/Her/Hers
- Senior in Computational Mathematics
- Arch
- Vim
- Python, JavaScript, Rust, and (a little) Haskell

#### Aria

- she/they
- Arch and Debian or Alpine for servers
- 4th year CE
- I like doing things with electronics and microcontrollers
- Music enthusiast











# Who are you?

- Name
- Major
- Year
- Pronouns
- Operating System (OS) / Linux Distro you use (can be anything!)
- Anything else you would like to share :)

## What is RITlug?

- Began ca. 2007, probably
- Student-led organization to create a community for (and encourage contribution to) Linux and free/open source software
- Weekly meetings 4:30-6:00 PM on Fridays







# What is free and open-source software?

- Many software projects are proprietary
  - Source code is kept secret by the developers
  - Users rely on developers to make improvements
- Open-source software: source code is available publicly
- Free software makes additional guarantees:
  - Freedom to view, copy, modify, or redistribute
  - Encourages user contribution
- Free software licenses
  - Copyleft: modified versions must keep the same license







# Why free software?

- More secure
  - Anyone can look for and rectify vulnerabilities
- Community-driven
  - Reflects community needs instead of profit
- Longevity
  - Software can be rebuilt or modified for future systems























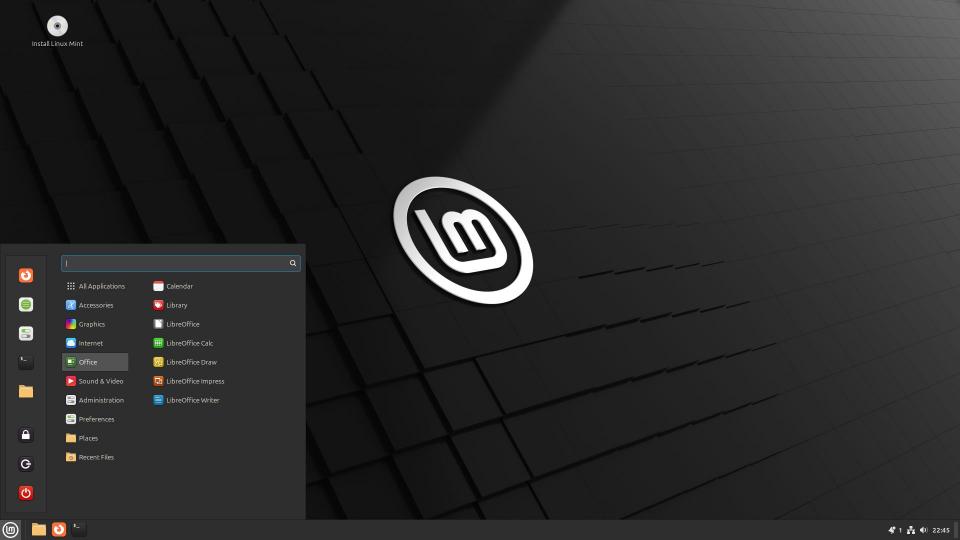
#### What is Linux

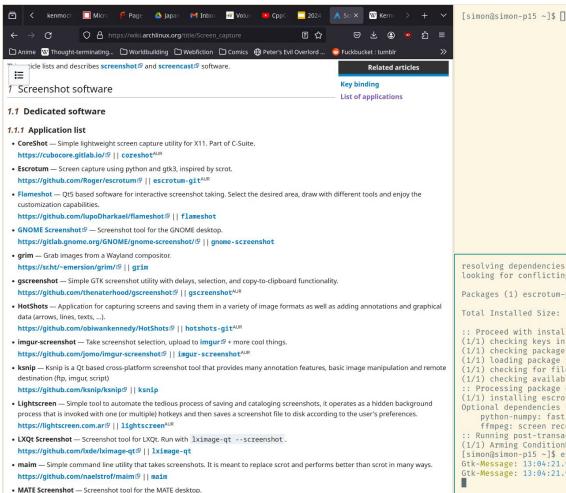
- A free and open source operating system kernel
- What is a kernel?
  - Mediates control between the hardware and the user processes
  - Also mediates control between user processes and each other
  - Memory management, process scheduling, other boring stuff like that
- What does it mean to use Linux?
  - Typically, we actually mean that we are using a Linux-based software distribution (distro)
    - Linux + systemd + GNU userspace + ...
    - Linux + OpenRC + busybox + ...

# Why use Linux?

- It's FOSS (see previous previous slide)
- Modular
  - Linux distributions are a collection of independent components
  - Users can pick and choose when building their system
- Customizable
  - Linux is not an operating system unto itself, just a "Kernel" (the very core of a OS)
  - There is a wide variety of operating systems built upon Linux
    - Ubuntu, Fedora, Arch, Android

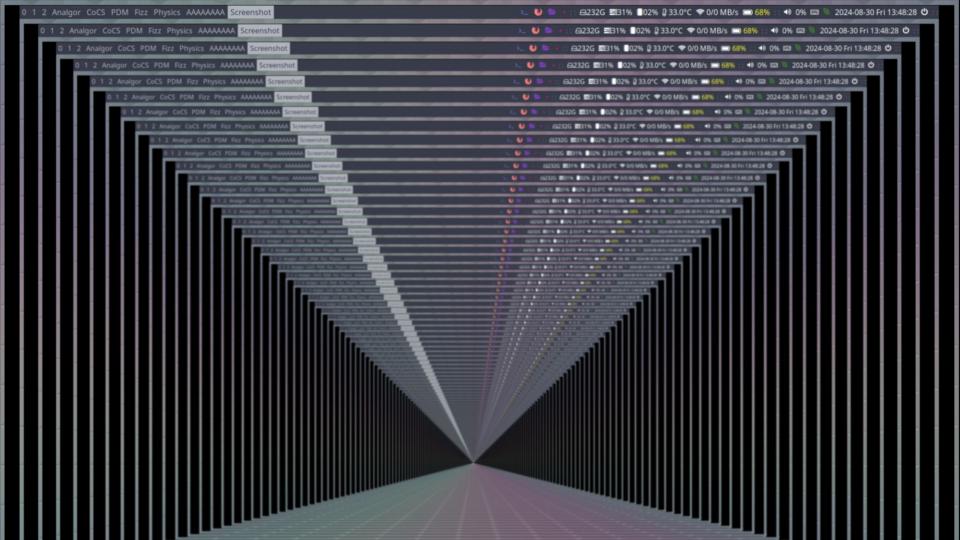
What does Linux look like?





```
resolving dependencies...
looking for conflicting packages...
Packages (1) escrotum-git-0.2.1.r48.a41d0f1-1
Total Installed Size: 0.10 MiB
:: Proceed with installation? [Y/n] v
(1/1) checking keys in keyring
(1/1) checking package integrity
                                                   -----1 100%
(1/1) loading package files
(1/1) checking for file conflicts
                                                   [-----] 100%
(1/1) checking available disk space
                                                   [-----] 100%
:: Processing package changes...
(1/1) installing escrotum-git
                                                  [-----] 100%
Optional dependencies for escrotum-git
   python-numpy: fast image generation [installed]
   ffmpeg: screen recording [installed]
:: Running post-transaction hooks...
(1/1) Arming ConditionNeedsUpdate...
[simon@simon-p15 ~]$ escrotum
Gtk-Message: 13:04:21.957: Failed to load module "colorreload-gtk-module"
Gtk-Message: 13:04:21.957; Failed to load module "window-decorations-gtk-module"
```

https://mate-desktop.org@ || mate-utils



#### Fill out the feedback form!



https://forms.gle/VNYEHKystLifFDZL9 (Sign in with your RIT account)

# Come give a talk!



http://present.ritlug.com Submit a presentation!



http://suggest.ritlug.com Suggest a topic!