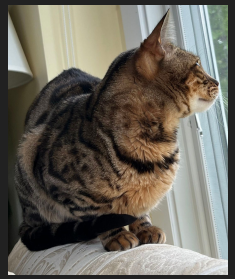
Welcome to RITlug!

Or as I've taken to calling it, RIT + LUG

Tristan

- he/him
- 3rd year CS major
- I use Arch (by the way)
  - Fedora, Alpine
  - Previously Manjaro and Debian
- C, Rust 🦀 🦀 🦀, shell scripts, (neo)Vim, ISO-8601/RFC 3339



C

Freya

- she/her
- 3rd year CS major
- I use GNU Guix
  - GNU/Linux
  - NixOS but GNU made it
  - Don’t use it
- C, Rust, PHP
- Neovim

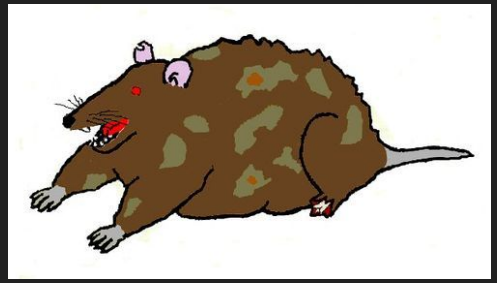
Rose

- She/Her/Hers
- Year Number Three in Computational Mathematics
- Arch, By The Way
- Emacs User
- Python and JavaScript are great when you want to make bad things quickly.

Fan of LaTeX

git

Simon



Say hi to Keith

- He/Him
- 3rd-ish year CS-ish major
- Arch Linux, Windows (Server)
- Languages: C, C++, x86 Assembly/Machine code
- Editors: Vim (not neo), emacs (once or twice), Microsoft™ Visual Studio®

Who are you?

- Name
- Major
- Year
- Pronouns
- Distro/OS 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

https://campusgroups.rit.edu/RITLUG/club_signup

https://discord.gg/xev2W62

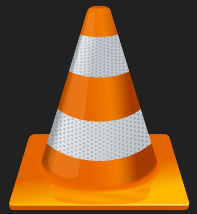
https://ritlug.com/

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



(sort of)

GODOT
Game engine

What is Linux

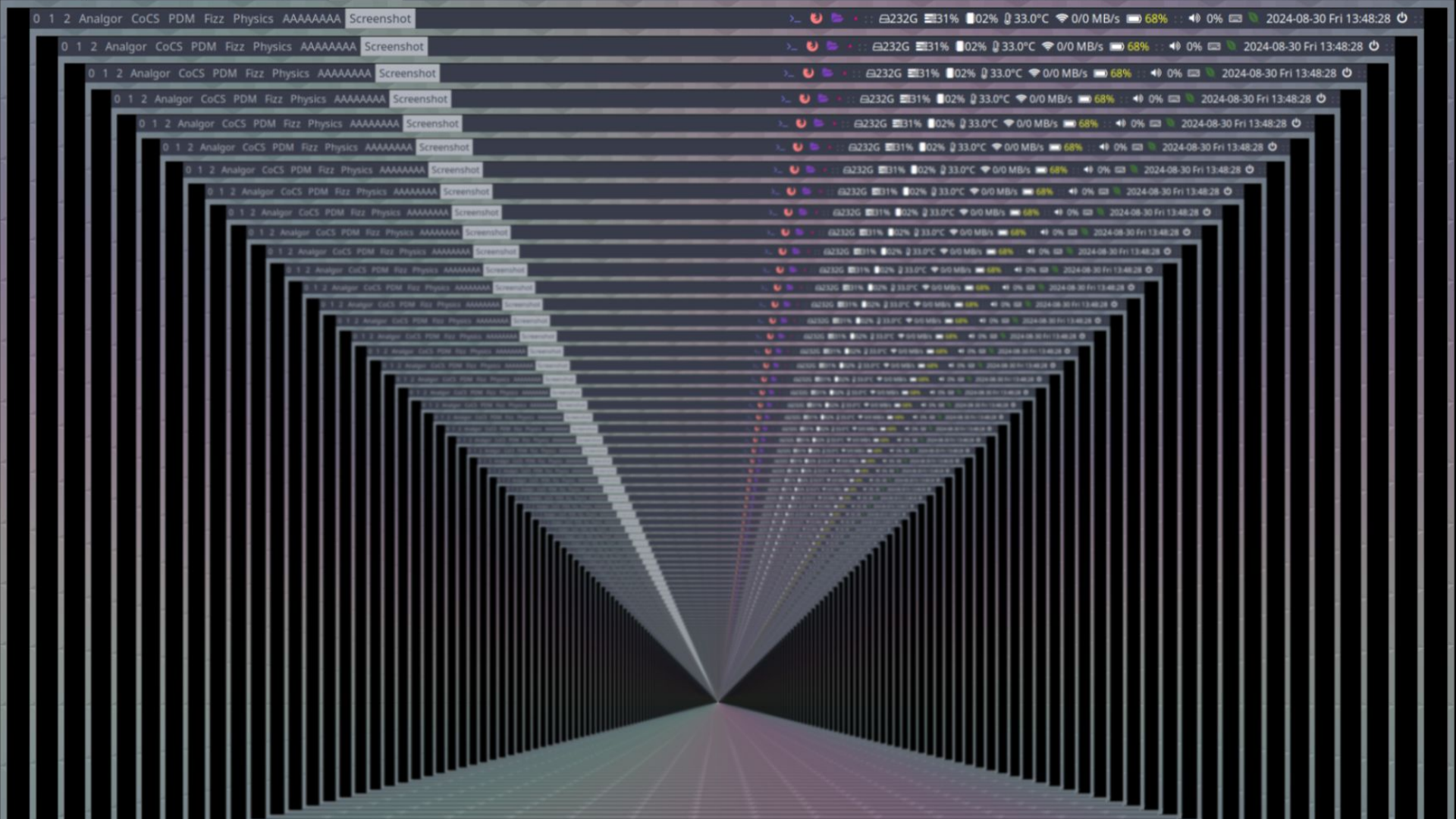
- A free and open source operating system kernel
- What is a kernel?
  - Mediates control between the hardware and the user processes
  - Also mediates control between user processes and each other
  - Memory management, process scheduling, other boring stuff like that
- What does it mean to use Linux?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

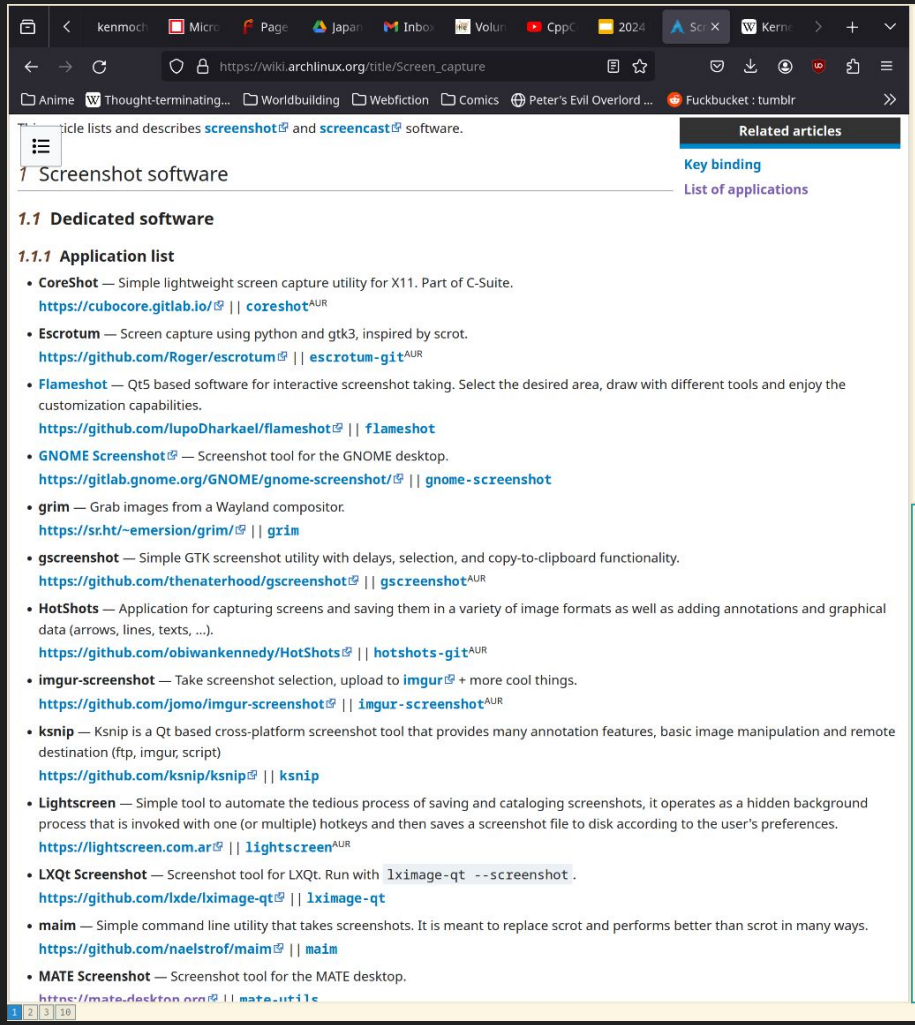
Why use Linux?

- 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?

Activities
Aug 30 13:05
Home


0 1 2 Analgor CoCS PDM Fizz Physics AAAAAAAA Screenshot
232G 31% 02% 33.0°C 0/0 MB/s 68% 0% 2024-08-30 Fri 13:48:28




```
[simon@simon-p15 ~]$
```

```
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] y
(1/1) checking keys in keyring                     [----------------------------] 100%
(1/1) checking package integrity                   [----------------------------] 100%
(1/1) loading package files                        [----------------------------] 100%
(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"
```

Come give a talk!

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

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