So You want to be a Linux Kernel hacker!!!!

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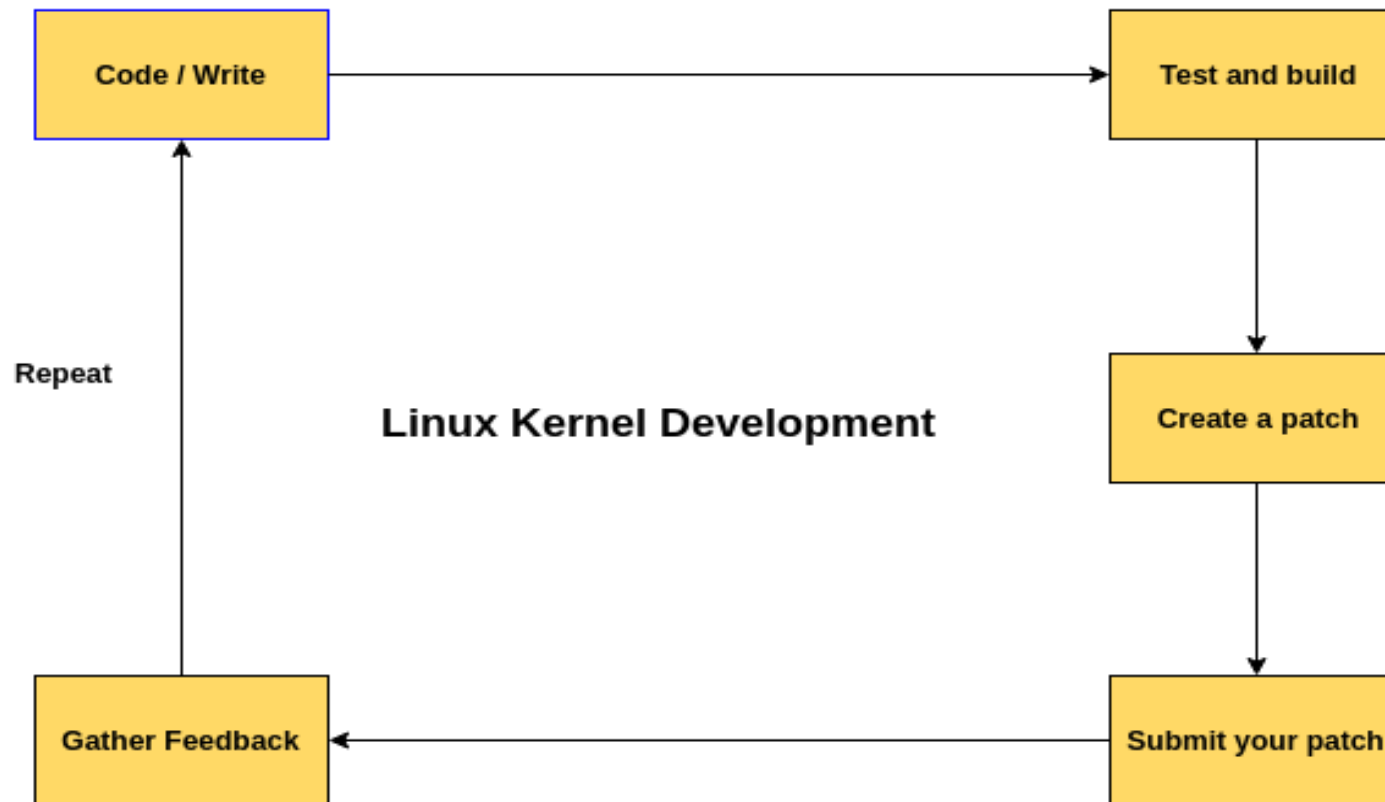
Who Am I?

The purpose of this 5 minute talk
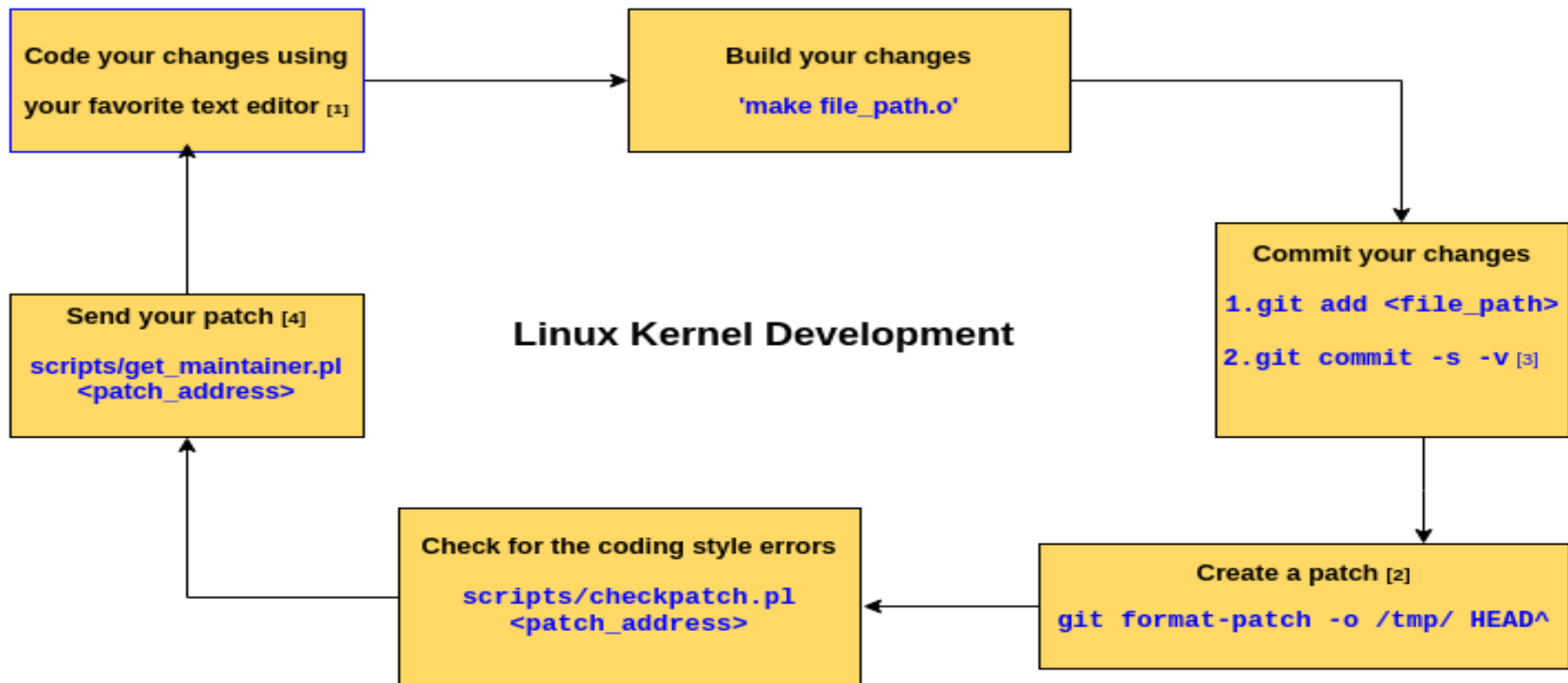
How I got involved?

- Outreachy

- Kernel contribution

- Got a full-time job as a kernel developer

Process of the Kernel Development

- linux kernel hacking==creative cycle

Process of the Kernel Development

Code your changes using your favorite text editor [1]

Build your changes
'make file_path.o'

Commit your changes
1. git add <file_path>
2. git commit -s -v [3]

Send your patch [4]
scripts/get_maintainer.pl <patch_address>

Linux Kernel Development

Check for the coding style errors
scripts/checkpatch.pl <patch_address>

Create a patch [2]
git format-patch -o /tmp/ HEAD^

[1] Do the changes in your local branch: https://kernelnewbies.org/FirstKernelPatch#head-4fc0349738a61ed254bcbef7a980321c77495014

[2] You should see the command output with a filename in /tmp/

[3] Philosophy of Linux kernel patches: https://kernelnewbies.org/PatchPhilosophy

[4] Using mutt to send patches: https://kernelnewbies.org/FirstKernelPatch#head-dc6a8aa0be0d0e8ed9dc03726d0b5a1fb0f65e1f
Using git-send-email to send patches: https://burzalodowa.wordpress.com/2013/10/05/how-to-send-patches-with-git-send-email/

How newbies can get involved?

- Scratch your own itch

- Static/dynamic analysis tools, fuzzers etc

- Kernel documentation project

- Kernel self protection project

- TODO list for DRM graphics subsystem:
  https://dri.freedesktop.org/docs/drm/gpu/todo.html

- Some other ways:
  https://dri.freedesktop.org/docs/drm/gpu/todo.html

Useful links

- **First kernel patch tutorial:**

  https://kernelnewbies.org/FirstKernelPatch

- **LWN Articles:** https://lwn.net/Kernel/

- **Greg Kroah-Hartman's talk on Linux kernel development:**

  https://www.youtube.com/watch?v=vyenmLqJQjs

- **Linux kernel documentation**

Welcome to the Linux kernel community!