Himadri CS' two cents on
Open source contributions & Mentorship programs
for the Linux kernel

9 September 2023

Contributions

Outreachy Internship

Year: 2019

- 1/3 selected interns for the Linux kernel[1]

- Received mentorship from Michael Kelly from Microsoft's Linux kernel team

- Worked on improving the Linux kernel support for running as a guest on Microsoft's Hyper-V hypervisor [2]

- 6 patches got accepted

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[1]https://himadrics.tumblr.com/post/185158976310/
my-journey-of-getting-selected-as-an-outreachy
[2]https:
//himadrics.tumblr.com/post/187125172565/modifying-expectations

Linux Foundation Bug Fixing Mentorship

Year: 2020

- 1/8 accepted mentees

- Received mentorship from Greg Kroah-Hartman from the Linux Foundation

- Worked on fixing a bug found by syzkaller in the USB subsystem [3]

- 8 patches got accepted

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[3]https://himadrics.tumblr.com/post/634481719919165440/
linux-kernel-bug-fixing-mentorship

Inria

Year: 2021

- Worked as a Research Engineer with the Whisper group at Inria Paris

- Received mentorship from Dr. Julia Lawall, a Senior Research Scientist

- Worked on evaluating the Nest scheduling policy for the Linux kernel[4]

- Got motivated to pursue a PhD on the scheduler [5]

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[4]https://inria.hal.science/hal-03612592/file/paper.pdf
[5]https:
//himadrics.tumblr.com/post/681870366324490240/the-nest-year

Takeaways

Good First Contributions

- Fix a checkpatch warning

- Improve Documentation

- Work on a Staging Driver

- Fix a bug!

- Participate in code reviews

Skills Required for contributing

- Familiarity with the C Programming Language

- Familiarity with git

- Understanding of Operating Systems concepts

- Familiarity with the Linux Operating System

- Patience to read the Documentation

- Perseverance to follow through on patches

Learning Resources

- https://kernel.org/

- https://lwn.net/Kernel/

- https://events.linuxfoundation.org/
  lf-live-mentorship-series/

- https://training.linuxfoundation.org/training/
  a-beginners-guide-to-linux-kernel-development-lfd103/

- https://kernelnewbies.org/Outreachyfirstpatch

Useful Blogs

- https:
  //himadrics.tumblr.com/post/631782057416261632/
  how-to-get-started-with-linux-kernel-development
- https://medium.com/code-dementia/
  a-beginners-journey-into-linux-kernel-d315f0af4757
- https:
  //blog.realogs.in/experience-of-lfx-mentorship/
- https:
  //himadrics.tumblr.com/post/677875446729293824/
  books-to-help-understand-operating-systems
- https:
  //himadrics.tumblr.com/post/678082312092680192/
  books-on-the-history-of-operating-systems

Questions?

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