



Xen Project Open Source (=FOSS) Internships 2017

Lars Kurth
Community Manager, Xen Project
Chairman, Xen Project Advisory Board

  lars_kurth



Job Opportunities

Many vendors are hiring people with Xen Developer Skills

BUT: It is hard to find
Engineers with the right skills
(this is true for many
Linux Foundation Projects)

FOSS Internship Programs

GOAL: Train Engineers with Xen Project Skills

Internship

- Typically lasts 3 months
- **Intern** works from home on a small FOSS project
- **Intern** is paid around \$5500 per internship
- Project funds a number of internships (plan for 4 in 2017)

Under supervision and with help of a **mentor**

- FOSS community member with experience
- Works for a company: good Interns tend to get hired after internship completes
- Spends 4 - 8 hours a week to help the intern



How Do Internships Work?



Mentor = Community Member (Developer, Maintainer, Committer) with some experience in working with the Xen Project

Adds a project to

https://wiki.xenproject.org/wiki/Outreachy/Round12%2B2016GSoC#Community_Reviewed_Project_List OR

https://wiki.xenproject.org/wiki/Outreach_Program_Projects

Other mentors review the project

Project must **cover an addition or add-on to the Xen Project**

Example Project

This is the mentor

Rust bindings for libxl

Date of insert: 18/02/2016; **Verified:** 18/02/2016; **GSoC:** yes

Technical contact: Doug Goldstein <cardoe@cardoe.com>; make sure you CC xen-devel@lists.xenproject.org in communications

Difficulty: Medium

Skills Needed: Familiarity with both C and the Rust language

Description: libxl is a robust library designed to be able to drive all necessary interaction with a Xen system; it's the library on which both xl and libvirt-xen are written. The Rust programming language (<http://www.rust-lang.org>) is a modern language from Mozilla that aims to be a useful, small, typed language for user-level systems programming. As such, it is an obvious choice to write a control daemon or other system on top of libxl. The goal of this project would be to sketch out an initial implementation of Rust language bindings for libxl, along with a test suite to make sure that the interface works and is useable (as well as to serve as a template).

Outcomes: A draft Rust interface that appropriately represents the libxl interface (or a useful subset). Code which implements that interface; in particular translating elements from the C interface into Rust structures. A test / example program to demonstrate the functionality and utility of the interface.

Project needs to be

- Interesting (otherwise there won't be applicants)
- Well described (otherwise it may not be doable)
- Small enough: aka doable in 2-3 months
- Not require special HW
- Must be an Open Source task

Our list of projects:

wiki.xenproject.org/wiki/Outreachy/Round12%2B2016GSoC#Community_Reviewed_Project_List



Does one of the following:

- 1) Applies as Mentoring Organization to <https://developers.google.com/open-source/gsoc/>
- 2) Funds Outreachy internships <https://www.gnome.org/outreachy/>
- 3) Funds Linux Foundation internships
(starts in 2017 – details to be announced in early 2017)



Intern picks a project from

https://wiki.xenproject.org/wiki/Outreachy/Round12%2B2016GSoC#Community_Reviewed_Project_List

Then works on **small tasks = micro-task**
(e.g. bugfix, very small task, etc)

Goal:

- **Intern:** Get familiar with project
- **Mentor:** Evaluate that Intern can deliver the project

Then formally applies via the latest application page on

<https://wiki.xenproject.org/wiki/Category:Outreachy>

Good Interns normally get hired

Examples:

Andres Lagar-Cavilla (GridCentric – was working on Xen for 5 years)

Wei Lui (Citrix – working on Xen)

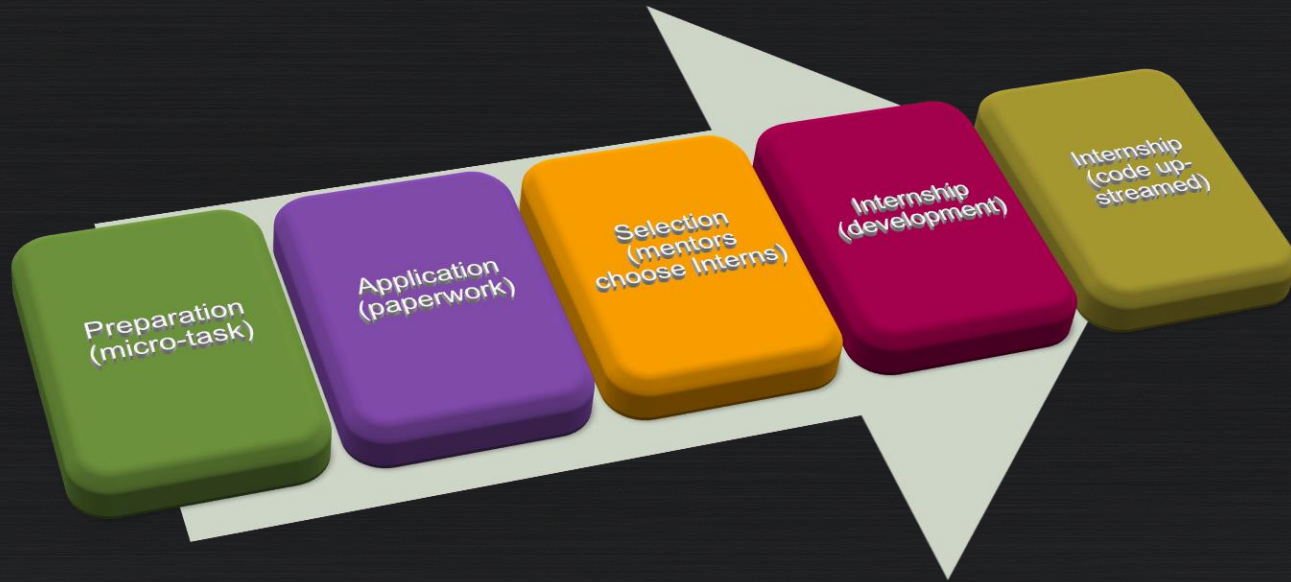
Daniel Kiper (Oracle – working on Xen)

Elena Ufimtseva (Citrix, then Oracle – working on Xen)

Arianna Avanzini (Google – was working on Xen)

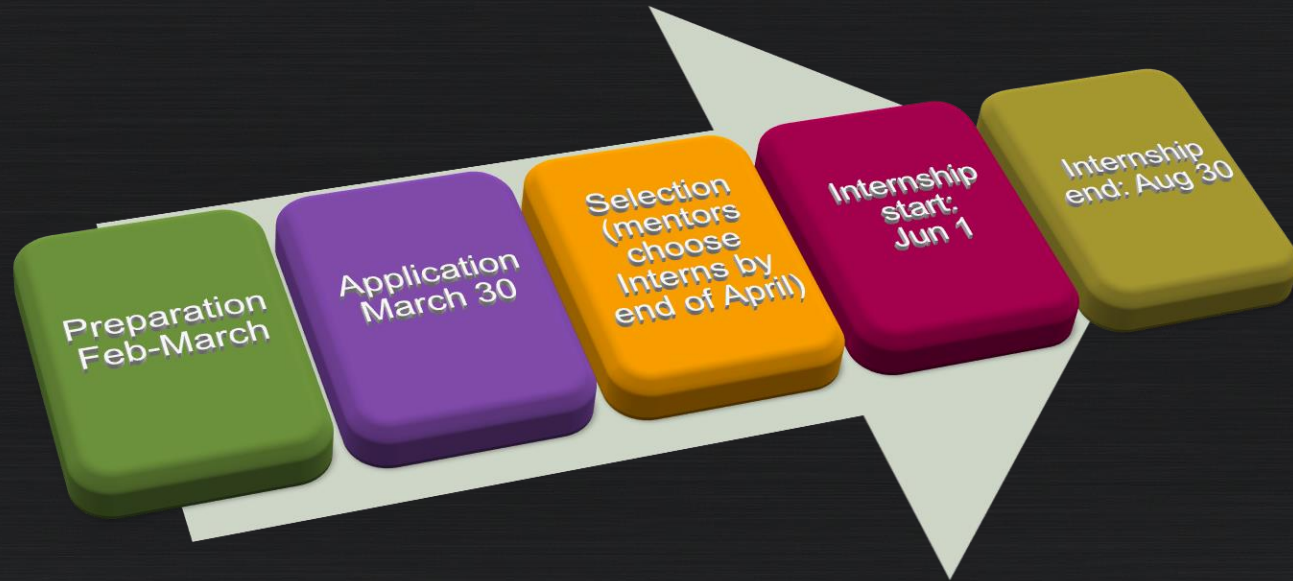
Mindy Preston (Docker – working on MirageOS)

FOSS Internship Programs: Stages



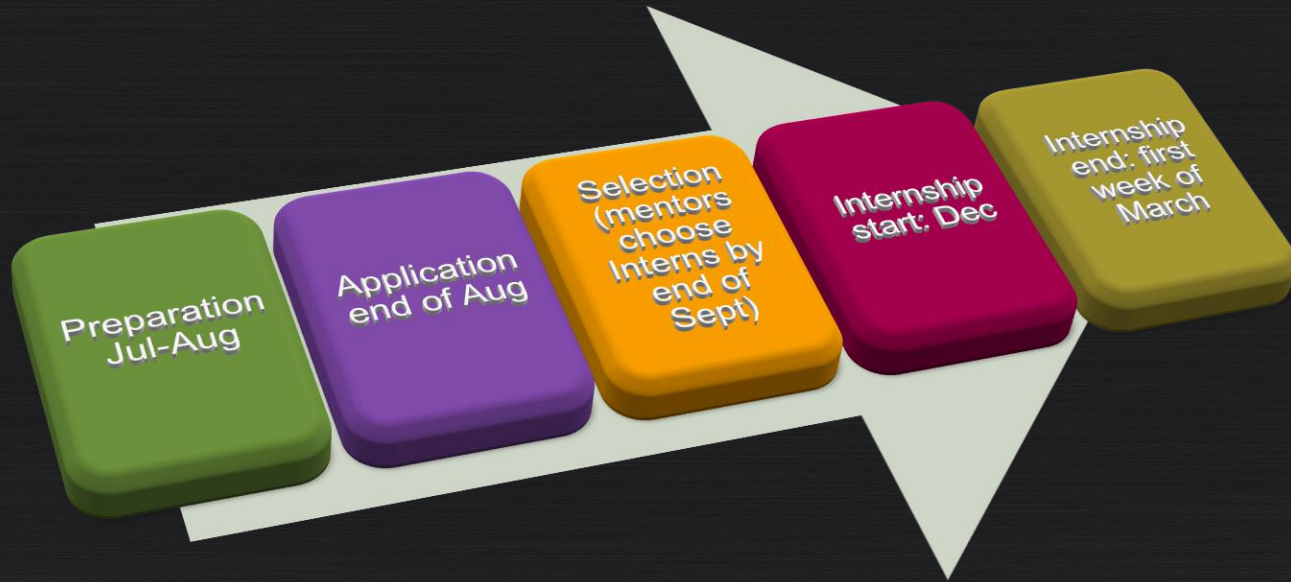
Timeline Summer

Exact dates vary slightly each year



Timeline Winter

Exact dates vary slightly each year



Different Programs We Participate in

Google Summer of Code

- Very few Linux Foundation Projects get accepted
- Xen Project gets accepted every 2-3 years)

Outreachy (formerly OPW)

- <https://www.gnome.org/outreachy/>
- Summer and Winter Round
- Targeting Women in Technology + Minorities (in the USA)

Linux Foundation Internships

- To be launched in Jan 2017
- No restrictions: Women and Men

FAQ

When does it make sense for a an applicant to look at projects?

They From February in the summer round, as we will update the project list in January.
From July for the winter round, as we will update the project list in June.

What language is the program conducted in?

All public communication happens in English. Of course if the mentor and applicant speak the same language, they may do so in private

Can for example Chinese applicant be mentored by someone in the USA?

Of course: but consider that there is a decent decent time-zone overlap between applicant and mentor.

If I am not sure, whom can I ask about Internships?

For the Xen Project, ask on th emailing list and/or community.manager@xenproject.org