

XU LINGXIAO

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🎓 EDUCATION

North University of China (NUC), CN 09/14 – 06/18

Major: Electronic and Information Engineering

👤 WORK EXPERIENCE

Institute of Acoustics of the Chinese Academy of Sciences 03/18 – 06/18

Intern Ultrasonic Photoelastic Visualization Development

- Designed the basic set-up for the photo-elastic system including the delay circuit for timing and delay of illumination with respect to the pulse.
- Developed the software of the whole system, including camera control, image capture, image scaling, image processing.
- Learned a lot about C++ programming and Qt5.

National University Of Defense Technology, Full-time 07/18 – 06/19

Operating System Engineer Mobile OS Team

- Improved many libraries used by Kylin OS. For example, optimized the display performance of graphics inside, and added new features to the sensor framework.
- Ported the OS to different devices, such as ST700, Nexus 4, Nexus 7.

Operating System Engineer, Desktop Environment Developer Ubuntu Kylin Team

- Maintained the open source projects of UbuntuKylin. Created the Devops System of the projects including automatic tools and testing frameworks.
- Developed and Maintained ukui desktop environment. Added HiDPI support to the desktop environment, upgraded the system tray, followed the rules of the freedesktop.
- Customized a special UbuntuKylin version which could running in the docker with full desktop environment, replaced some Dbus services and customized the graphics under the desktop environment.
- Created UbuntuKylin Wiki, based on nodejs.

Itering Technology, Full-time 11/19 – Now

Blockchain Engineer Rust developing groups

- Ported the blockchain to loogson mipsel board.
- Development the fundanmental of the darwinia network.

🐱 PERSONAL PROJECTS

rtoynos <https://github.com/readlnh/rtoynos>

Simple,mini Operating System kernel written by C Programming Language

- Using the Multiboot standard, bootloading with Grub2.
- Supporting simple memory management.
- Supporting multitasks.

rdocker <https://github.com/readlnh/rdocker>

My own docker written by Golang(Developing...)

- Isolating applications in a virtual private root but taking the process further.
- Supporting six Namespaces, including UTS(hostname), IPC(inter-process communication), NS(mount points), NET(network access), USER(map virtual, local user-ids to real local ones).
- Using Cgroups to control the resources.

♥ HONORS & AWARDS

The ACM-ICPC Asia Regional Contest Hefei Site 2015 *Bronze Medal* 10/15

The 7th Contest of LAN QIAO CUP Software B group Shanxi *First prize* 03/16

The 7th Contest of LAN QIAO CUP Software B group Final *First prize(top50)* 05/16

The Second Group Programming Ladder Tournament Northwestern Regional Contest *First Price* 03/17

The Second Group Programming Ladder Tournament Northwestern Final Contest *Second Price* 07/17

⚙️ SKILLS

- **Programming Languages:** **multilingual developer** (not limited to any specific language), and especially experienced in C/Rust/Python/Go, comfortable with C++/C#/lisp/ruby (listed in random order).
- **Operating System:** familiar with the graphics architecture of Android/Linux, including both low-level and high-level components understand MemoryBlock, IPC and Threading Models, studied some theories about filesystem.
- **C/C++:** **4 years** of experience, familiar with gtk+/Qt programming, Linux Programming, the CMake build tool, have experience in OpenCV/OpenGL.
- **Algorithm Theories:** familiar with Dynamic Programming, Greedy Algorithms, Data Structures, Graph Algorithms, understand Computational Geometry and Number theory.
- **Developing Tools:** can adapt to any editors/OSs, usually use vim/VsCode and JetBrains IDEs under Ubuntu. Experience working with Git and Git workflow.
- **Devops:** Experience working with docker and k8s.
- **Languages:**
 - Languages: English - fluent, Chinese - native speaker

📖 MISCELLANEOUS

- Blog: <https://readlnh.github.io/> haven't translated into English
- Member of Chinese Rust Programming Community
- Ubuntu developer
- Books about operating system I've translated: https://github.com/readlnh/Writing-an-OS-in-Rust-Second-Edition-zh_CN
- Opensource contributions: pull-requested (functional improvements) to organizations like *Rust*, *Ubuntu*, *Redox*
- Love making friends