

Nan Xiao

Basic information

- Gender: Male
- Birthday: 18/8/1983
- Nationality: Chinese
- Location: Singapore
- Email: nan@chinadtrace.org

Websites

- <http://nanxiao.me> (Chinese).
- <http://nanxiao.me/en> (English).

Education

- Master's degree, Computer Science at University of Science and Technology Beijing (September, 2005 ~ January, 2008)
- Bachelor's degree, Computer Science at University of Science and Technology Beijing (September, 2001 ~ June, 2005)

Summary

I am a system software / performance engineer, and have more than 10 years experience in software architecture & development: from embedded system to server box. I am especially enthusiastic in technologies related to computer infrastructure, such as Operating System kernel, concurrent programming, debugging, performance tuning, etc. I like to keep studying and trying new stuff which I haven't touched before, e.g., in the past 2015, I focused on Go and FreeBSD, and now I think I should make my hands dirty in Rust and eBPF this year. I also love Free / Open Source software projects, and have done some contributions to them, like Linux kernel, Redis, unixODBC, and so on.

Skills

- Programming languages: C, C++, Go, Python, Bash, x86 & ARM assembly language.
- Concurrency programming: OpenMP / Nvidia CUDA / POSIX Threads.
- Socket programming.
- Linux / FreeBSD kernel programming.
- Operating systems: Linux / FreeBSD / Solaris.
- Databases: Redis / MySQL / Oracle.
- Virtualization/Container: Xen / KVM / Docker.
- Tracing technologies: perf / SystemTap / DTrace.

Personal projects

Code

- [Gouname](#): The "uname" command implemented in Go.
- [Lscuda](#): A small tool which parodies lscpu.
- [TCP server framework](#): A TCP server framework.
- [IO multiplex server](#): An IO multiplex server.

Tutorials

- [Go 101 hacks](#): A rudimentary Go programming language tutorial.
- [FreeBSD 101 hacks](#): A collection of FreeBSD hacks.
- [GNU/Linux /proc/pid introduction](#): A Chinese tutorial which introduces /proc/pid in GNU/Linux.
- [100 gdb tips](#) (Co-work with guys from [hellogcc](#)): A Chinese tutorial which shares gdb tricks and tips.

Others

- [Chinadtrace.org](#): A Chinese website which introduces the skills and knowledge of DTrace.

Working experience

Research Engineer at [DSI](#) (December, 2016 ~ Present)

- Research and develop cryptography technology.

System Software Engineer at [HPE](#) (January, 2015 ~ September, 2016)

- Working in HPE Open Source team, including contributing to Linux kernel, tuning HPE server performance, etc.

Software Engineer at [Aicent](#) ([Acquired by Syniverse now](#)) (September, 2010 ~ January, 2015)

- Maintain and development international SS7 SMS gateway.

Software Engineer at [MediaTek](#) (December, 2007 ~ September, 2010)

- Maintain and develop mobile applications in MTK native platform, such as eBook, email, etc.

Software Engineer Internship at [IVT](#) (November 2006 ~ April 2007)

- Develop Bluetooth applications in embedded Linux.

Software Engineer Internship at [Dayo](#) (May 2006 ~ October 2006)

- Develop Dual-SIM software protocol stack.