PROFILE

YANG DONGDONG
Software Engineering Manager / High-performance System Architect

Name: Yang Dongdong
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15 years of software development experience in the high-performance network system and products, e.g. router, firewall. Solid skill in C, Golang programming and debugging, An expert in IP/MPLS and ethernet protocols. Good at data engineering and common data analysis. Experienced still on high-performance software design and architect.
I am also a full-stack software engineer. Willing to try some idea or solve the hard problem with my skill and experience.
Here is my blog with some posts http://donge.org (Chinese) and Github: https://github.com/donge

RESUME

EMPLOYMENT

Servicewall.ai — 2018.4 - present
Founding Engineer / Architect

Design and build the product from 0 to 1. The product is software-based, focus on service level security, leverage big data and machine learning to analyze the risk in customed service.
The software is mainly Golang stack with docker deployment. it can be scaled out with multiple instances include infrastructure components.
Leverage many open-source projects to shorten the development cycle, include Nginx, Clickhouse, Spark, Redis, Kafka, Cube.js...
With the architect, we win and support many customer case with a small team, and grows very fast.

Juniper Networks — 2013.4 - 2018.4
Software Engineering Manager

As manager of SRX platform team, owns CPU/BSP, Driver, Kernel, Network stack, Forwarding engine on SRX firewall.
The platform team works across different geo teams to support feature design, bugs fix, and customer support.
Our team gets very positive feedback from India and the headquarters. and I am promoted as manager from MTS4, Staff, Manager from 2013 to 2016.
The product has hardware-based and virtualization-based, with unified software architecture to deliver high-performance low-cost product, our features include, IP/MPLS Routing and Forwarding, Traffic Policer and Shaping, Kernel, Driver, and BSP maintenance.

Huawei — 2006.7 - 2013.3
Senior Software Engineer

Works in Huawei Beijing R&D for nearly 7 years in network system platform. As a technical leader in the team for 4 years, project leader for 1 year. Be responsible for module design, coding, patent etc.
Chief designer and developer in TRILL project, its a highlight feature in data-center switch, and got Beijing R&D designer award in 2012.
As technical leader, publish 5 patents as author or co-author in network and system area.
Optimize and tuning performance of routes coverage, win top1 result serval time in a comparison test with the competitor.
Kickout nearly 10 projects as project leader and developer in our team with high quality, refer to the details in LinkedIn.
Be a mentor and tutor in knowledge ramp-up.

EDUCATION

Shenyang University of Technology — 2002 - 2006
Computer Science & Technology

Got scholarship 3 times, all A grade in computer experiment course.
Startup computer association with roommates.
Participated in many programming competitions online, like ACM/ICPC, Topcoder, Baidu Astar.

PROGRAMMING SKILLS

Skill	Level
C	95%
Golang	90%
SQL	80%
Python	70%
Javascript	60%
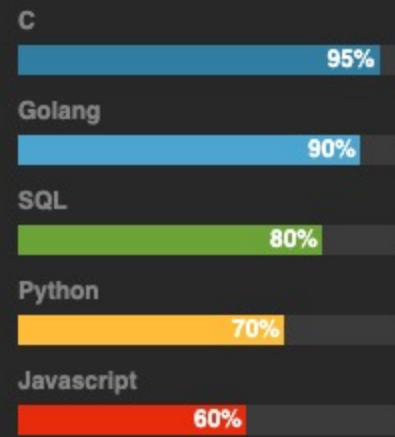
NETWORK SKILLS

- ISIS/OSPF/BGP/LDP/PIM
- Security Flow
- MPLS/L3VPN/VPLS/QoS
- Datacenter/TRILL
- SDN/NFV

TOOLS SKILLS

Tool	Level
Linux	●●●●●
GDB	●●●●○
Docker	●●●●○
Clickhouse	●●●●●
Spark	●●●○○

PROJECT

[All] [Servicewall] [Juniper] [Huawei] [Personal] [Patent]

Antibot-System
Cloud-native, distributed HTTP Proxy and Security gateway, real-time HTTP header and body check and analysis with ML.

Daybreak
An new SRX software archtecture for cloud service. Control plane OS works in nested VM, security service runs on X86/Linux with DPDK. Provide the same service as box, but all run in the virtual machine.

Forge
X86 based security platform, with VT-x, KVM/QEMU. To improve the datapath performance, leverage the DPDK, SRIOV, VirtIO tools.

Branch SRX
Branch SRX targets the enterprise market, the SRX platforms are from on-desk to 2U chassis, with MIPS architecture. It integrates the JUNOS and ScreenOS. Provide full features of security. Flow, Routing, NAT, Screen, ALG, VPN, UTM, IDP.

wFilter
wFilter is a mini full-stack personal project for blocking the webpage which contains keyword in data-base with high-performance design, with Aho-Corasick string matching and DPDK. The front-end is "MEAN"(MongoDB, ExpressJS, AngularJS, Node.js)

Bitcoin Autotrade Robot
Draft with Python and rewrite with Golang, it deploys on Raspberry PI, and do transaction automatically based on the latest price and strategy. The parameters can be configured anytime and anywhere with a mobile phone. Implement APIs for Top 5 Bitcoin transaction site.

Disk Usage Visualized
Visualized the usage of a disk with d3.js, data is caught by a shell script.

TRILL
Led TRILL protocol requirements analysis, architecture and module design, as design leader, drive the TRILL overall design and participate in the process of development, it's key feature of Huawei CloudEngine series switches products.

IP FRR
Responsible for the IP FRR design. As project Leader, be responsible for project technical research, design, later stages of development and implementation of the work. Development project manager, responsible for project planning, tracking, and project delivery.

CONTACTS