



PROFILE



YANG DONGDONG
Software Engineering Manager /
High-performance System
Architect

Name: Yang Dongdong
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19 years of high-performance network system and product software development experience, focusing on Ethernet switching, routing, and security solutions. Proficient in C and Golang programming and debugging. Professional expertise in IP/MPLS, Ethernet protocols, and data center networking. Rich experience in high-performance software design and architecture.

Familiar with network and application security solutions, and led a team from 0 to 1 to design and develop an API security platform, achieving product commercialization and certain scale.

Also a full-stack software engineer, focusing on building scalable and efficient systems. Passionate about solving complex technical challenges and driving network technology innovation.

Understanding of machine learning and big data technologies, with deep understanding of LLM principles and applications, experience in designing and developing RAG, LLM Agent and other AI applications.

Here is my blog <http://donge.org> and Github: <https://github.com/donge> (both with 1500+ commits in recent years)

RESUME

EMPLOYMENT

Servicewall.ai 2018.4 - present
Founding Engineer / Architect

Design and build products from 0 to 1. The product is software-based, focusing on service and API-level security, leveraging data and AI analysis to assess risks in customer services.

The software primarily uses Golang technology stack and Docker deployment. It can be scaled with multiple instances, including infrastructure components.

Leverage multiple open-source projects to shorten development cycles, including OpenResty, Clickhouse, Spark, Redis, Kafka, Cube.js, etc.

I led a 12-person R&D team, and we won over 100 customers with revenue exceeding 15 million.

Built the R&D team, organized recruitment and training, defined R&D processes including code standards, CI/CD processes, testing processes, etc.

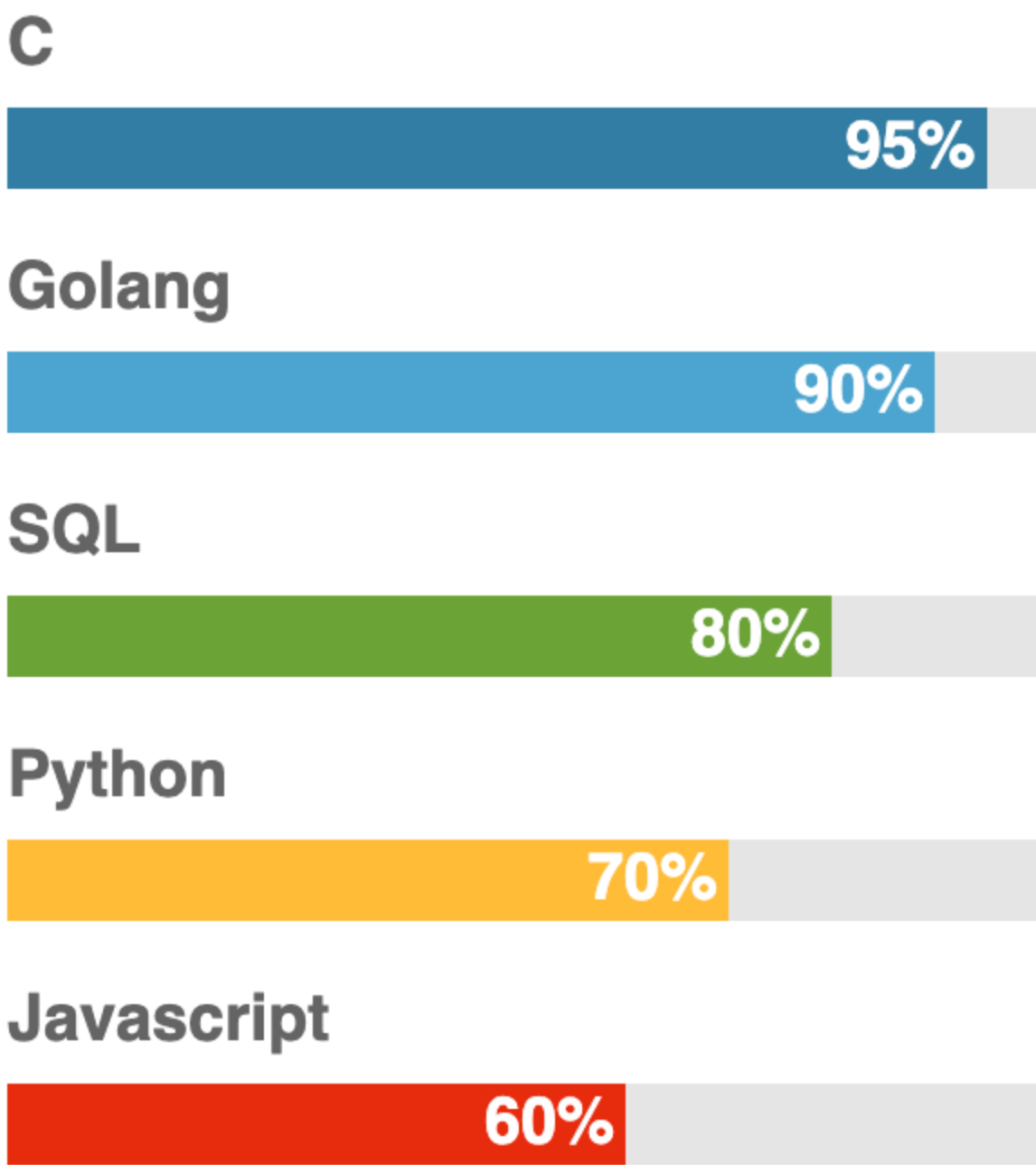
- Key Projects:**
- [API Security Platform](#) - Cloud-native distributed HTTP proxy and security gateway, using machine learning for real-time analysis of HTTP headers and content
 - [AI Business Firewall](#) - Large model firewall product, protecting LLM applications from emerging threats
 - [Mobile Threat Detection](#) - Client-side security SDK, device fingerprinting, solving secure access for mobile applications
 - [Data Security Control](#) - Personal information classification and grading, deep traffic analysis, real-time alerts and blocking

Juniper Networks 2013.4 - 2018.4
Software Engineering Manager

As manager of the SRX platform team, responsible for CPU/BSP, drivers, kernel, network stack, and forwarding engine development on [SRX firewall](#).

The platform team collaborates with teams from different regions to support

PROGRAMMING SKILLS



NETWORK SKILLS

- ISIS/OSPF/BGP/LDP/PIM
- Network Security/Data Analysis
- MPLS/L3VPN/VPLS/QoS
- Computing Network/SDN/NFV
- AI/RAG/LLM

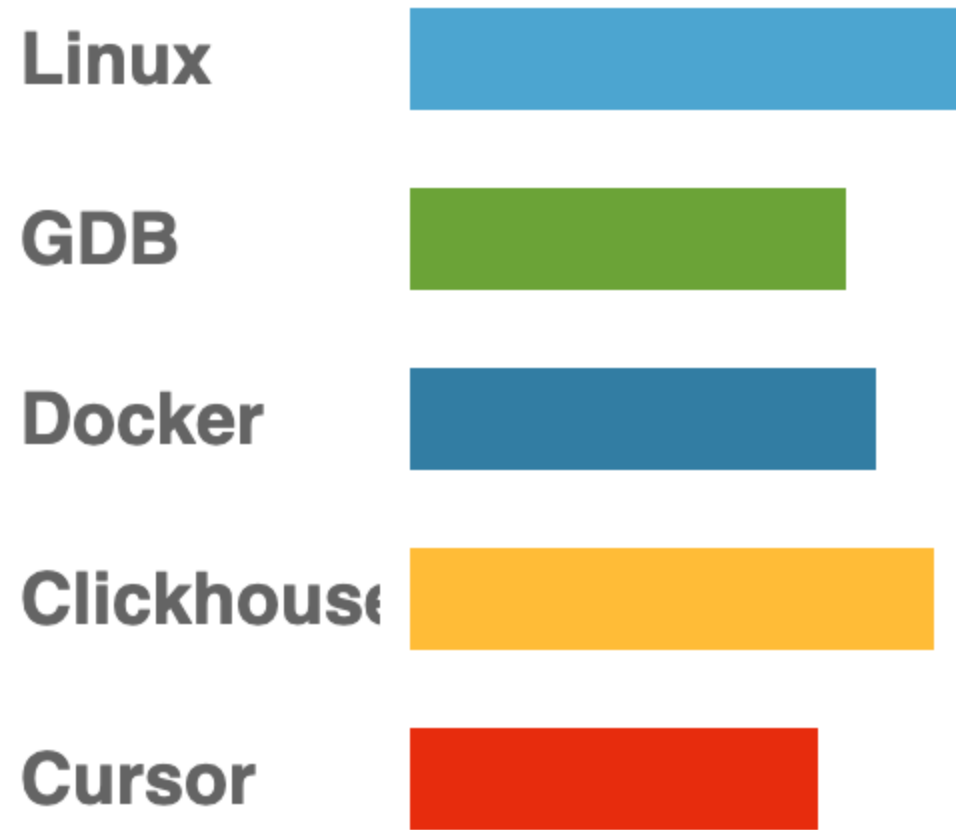


TOOLS SKILLS

feature design, bug fixes, and customer support.
Our team received positive feedback from India and headquarters, and I was promoted from MTS4 to Staff to Manager from 2013 to 2016.
The product supports both hardware and virtualization solutions, using unified software architecture to provide high-performance, low-cost products. Our features include IP/MPLS routing and forwarding, traffic policy and shaping, kernel, driver, and BSP maintenance.

Key Projects:

- [Daybreak](#) - New SRX software architecture for cloud services, control plane OS runs in nested VMs, security services use DPDK
- [Forge SRX1500](#) - X86-based security platform, using VT-x, KVM/QEMU, leveraging DPDK, SRIOV, VirtIO tools
- [Branch SRX Firewall](#) - Enterprise SRX platform, MIPS architecture, integrating JUNOS and ScreenOS, providing complete security features



► Huawei

2006.7 - 2013.3

Senior Software Engineer

Worked at Huawei Beijing R&D Center for nearly 7 years, focusing on network system platforms, particularly Ethernet switching and routing technologies. As team technical leader for 4 years and project leader for 1 year, responsible for module design, coding, and patents.
As chief designer and developer of the TRILL project, a highlight feature for data center switches, and received the Beijing R&D Design Award in 2012.
As technical leader, published 5 patents as author or co-author in network and system areas.
Optimized and tuned routing convergence performance, achieving first place multiple times in comparison tests with competitors.
As project leader and developer, completed nearly 10 projects with high quality in the team, see details on LinkedIn.
Served as mentor and trainer for knowledge enhancement.

Key Projects:

- [TRILL](#) - Key feature for data center switches, TRILL protocol requirements analysis, architecture and module design
- [IP FRR](#) - Fast reroute technology, responsible for project technical research, design, development and implementation
- [Non-stop Routing](#) - VRRP NSR prototype project, organized technical discussions, development plans and solution decisions
- Patent Achievements - Published 10 patents as author or co-author in network, system and API security areas

▼ EDUCATION

► Shenyang University of Technology

2002 - 2006

Computer Science & Technology

Received 3 scholarships, all A grades in computer experiment courses.
Co-founded computer association with roommates.
Participated in multiple online programming competitions, such as ACM/ICPC, Topcoder, Baidu Star (Top 300 nationally).

Personal Projects:

- [wFilter](#) - High-performance web keyword filtering system, using Aho-Corasick algorithm and DPDK, MEAN full-stack architecture
- [Bitcoin Auto-trading Robot](#) - Python/Golang development, deployed on Raspberry Pi, supporting multiple exchange APIs
- [Disk Usage Visualization](#) - Using d3.js to visualize disk usage, data obtained through shell scripts



PROJECT



- All
- Servicewall
- Juniper
- Huawei
- Personal
- Patent
- Publications

API Security Platform

Cloud-native distributed HTTP proxy and security gateway, using machine learning for real-time analysis of HTTP headers and content.

Data Security Control

Classify and grade personal information and business information, and perform deep traffic analysis to detect privacy content in APIs and files, with real-time alerts, blocking, desensitization or approval access.

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.

AI Business Firewall

Large model firewall product designed to protect Large Language Models (LLMs) from various emerging threats, different from traditional web applications. These products integrate multiple functions to ensure the security, compliance and availability of LLM applications.

Daybreak

An new SRX software architecture 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.

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)

Mobile Threat Detection

Through client-side security SDK, collect and track device information within non-privacy scope, generate device fingerprints, solve secure access for mobile applications. Can also fundamentally solve web crawler issues.

Forge

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

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.



CONTACTS



CONTACT INFO

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VCARD

