Jun LIU

DevOps Engineer, Computer Architecture Student, Unix Hacker

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EDUCATION:

Sep. 2021 - Sep. 2023 | Tokyo Institute of Technology

Master of Engineering - Computer and Communication Engineering
Research Assistant of the department, research on chained events from hardware PMU in processors.
JASSO Monbukagakusho Honors Scholar.

Jul. 2013 - Jun. 2017 | University of Electronic Science and Technology of China

Bachelor of Engineering - Network Engineering
System Admin of CNSS CTF Team and UESTC News center, Maintainer of UESTC cloud cluster.

EXPERIENCE:

Chaitin Tech (Alibaba Group)

Infrastructure Engineer (Intern) | Jul. 2021 - Sep. 2021

- Participated in the development of CI/CD platform using Golang. Speeded-up CI/CD tasks by using multithreading to control VM lifecycle, and enhanced the robustness by persisting VM metadata.
- Used Helm to pack the CI/CD server as Kubernetes App for its own CI/CD.

NetEase Games

Senior DevOps Engineer (Fulltime) | Jul. 2017 - Jan. 2020

- In charge of daily maintenance, performance tuning, and troubleshooting of LBC cluster (100 Gbps LB PaaS service based on OSPF+LVS+Nginx, acts as the ingress of our Kubernetes cluster and various SaaS services). The LBC cluster scaled up more than 200% during my employment.
- Participated in the development of the LBC control plane (Python API + InfluxDB + PKI). Provided new features such as automatic scaling, consistent hashing, and traffic mirroring.
- Participated in the design of the LBC data plane HTTPS accelerating cluster (offload TLS parameters) to serve the growing HTTPS traffic. Made it easier for L7 clusters to scale vertically. It won the first-class technical honored award in our department and got serval patents.
- Acted as LBC project owner of LBC in the last few months, reorganized the documents, redesigned the monitoring system dashboard, and won praise from users because of the usability improvement. Also trained new grads in our team.
- (Minor works): Be responsible for the API Gateway service based on LVS+Kong, served important APIs such as login SDK and billing. Participated in the survey and testing of NetEase Game IDC server hardware. Researched the performance impact of KPTI patch on network and disk I/O, etc.

NetEase Games

DevOps Engineer (Intern) | Jul. 2016- Sep. 2016

- Analyzed the performance of common-used L7 proxy software, different cipher suites, and kernel parameters on HTTPS performance.
- Evaluate the capacity for entirely switching to HTTPS. Raised an optimization plan which can reduce CPU overhead by 30% on HTTPS handshaking.

PATENTS:

- Key-free SSL offload cluster system: application and storage method (CN110324365A)
- A new method of TLS information sending via proxy protocol (CN109040040B)

SKILLS:

Familiar: Python, Bash, TCP/IP, TLS, DNS, LVS/Nginx Load Balancer, Performance tuning
Understand: Golang, Kubernetes, KVM, Unix programming, IDC hardware, Cloud computing