Oliver, Lyu Jiayou

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Professional Certifications

Red Hat Certificated System Administrator (RHCSA)   *22 February 2021,* 210-020-723
Red Hat Certificated Engineer (RHCE)   *25 November 2021,* 210-020-723

Professional Experience

Harmonic Inc.

Site Reliability Engineer – Video Streaming Business   *March 2021 to Present*

- Serving the top Customer - Peacock 2.5: Successfully delivered the 2022 Superbowl night with over 4 million peak viewers and 17 days of Beijing2022 Winter Olympics Live campaign. Here, I was providing exclusive product testing, experienced supporting and smooth deploying for our most important clients, NBCUniversal Peacock TV & OneApp. 3 Exclusive tools involved: Varnish load balancer to simulate requests for US East + West Geo-redundancy, GitHub CI/CD + Argo to Sync up both clusters in different regions, LEM(LA) to manage status for live events; 1 Exclusive immediate supporting service, joining the MS Teams bridge and answering immediate requests for live events.
- Testing Flow: Cloud + Kubernetes based product deploying, environment sysadmin and testing, tested for general availability and exclusive customers such as SKY Brazil and HKJC, 2 cloud environments of Azure (AKS) and AWS (EKS), designing, drafting and reviewing test plans for NPIs(New product introduction), composing Knowledge bases and training new 2.5 SREs for support, ensuring the high scalability for 500 high-quality live service and 10,000+ VOD assets, 3 Time zones (APAC, EMEA, AMS) across the globe delivering well-crafted quality software products to 5+ high profile and >70 customers.
- Support Flow: Salesforce (SFDC) + PagerDuty + Jira based cases and bugs tracking; Prometheus, Elasticsearch Kibana and Restful API for troubleshooting; using kubectl and Linux shell tools obtaining and inspecting logs for component, judging the root cause of problems and determining to adjust configurations or escalate to developers.
- Deploying Flow: Compose method of procedure (MOP) for production changes, which cover detailed operation, possible situations, validation and fallback methods; Developing & Updating Python and Shell scripts for automation; bundle upgrade and blue-green upgrade using Ansible playbook on AWX, applying BG upgrade via route53 DNS change.

HKEX - Hong Kong Exchanges and Clearing Limited

Summer Intern – Clearing System Development & Support, IT   *June 2019 to August 2019*

- Pipelined update and migrate development workstations for clearing group in both hardware and software layer, which includes BIOS setting, SSD & HDD cloning and PCIe card setups, hardware troubleshooting, IBM Rational environment setups.

HSBC - The Hongkong and Shanghai Banking Corporation Limited

Industrial Placement – Online Banking System / Core IT COO ASP   *July 2018 to June 2019*

- Full endeavor to ensure Online Banking System (OBS) releases on Mainframe and maintenance jobs delivered with zero miss, zero mistake and zero delay with OBS teammates regardless communication, error correction and extreme weather situation.
- Coordinating and communicating with 3 developing teams from Hong Kong, Guangzhou and Xi'an on 3 principle OBS releases and simultaneously updating on OBS Endevor, CA Service Desk and OBS internal journal website.
- Automating traditional Mainframe Logging statistic with 5+ Python Scripts, transferred lengthy formatting and copying jobs into direct copy-paste jobs, decreased time-cost by 30%-50%.
- Fully Recorded working processes, tool usage and gained industrial practices on OneNote with Graphs for over 10+ chapters to help newcomers with quick mastering and colleagues with systematic teaching.

Personal Skills

Languages: English, Mandarin, Cantonese
IT skill sets: Linux, Kubernetes, Ansible, Python, Amazon Web Services (AWS), Microsoft Azure, Shell scripting, Java, Google Cloud, Kibana, Restful API, Microsoft Office, Data analytics and machine learning
Working Quality: Teamwork across globe, Project managing with time and quality, Standard tools workflow for software DevOps

Education Background

HKBU - Hong Kong Baptist University

Bachelor's Degree in Computer Science   *(with 1 gap year internship) September 2015 to June 2020*
AI ChatBot as FYP, Python & ElasticSearch stack. Object Oriented Programming (Java), Operating System and Computer Organization, Network Structure, Database, Software Engineering, Financial Management, Banking Management.

NCTU - National Chiao Tung University. *An exchange program of HKBU.* Info Security, Artificial intelligence and Machine Learning.
MIT - Massachusetts Institute of Technology. *MIT HK Innovation Node.* Disciplined Entrepreneurship, winning team building.
The University of Chicago Booth School of Business. *Polsky Center.* Competitive analysis, financial modeling, and successful pitching.

Publications   *https://scholar.google.com/citations?user=AtpFVbIAAAAJ&hl=en*

In-hospital cardiac arrest outcomes among patients with COVID-19 pneumonia in Wuhan, China.   *273 cites by Apr 2022*
F Shao, S Xu, X Ma, Z Xu, J Lyu, M Ng, H Cui et al. *Resuscitation* 151 (2020): 18-23.

Development and validation of prognosis model of mortality risk in patients with COVID-19.   *34 cites by Apr 2022*
X Ma, M Ng, S Xu, Z Xu, H Qiu, Y Liu, J Lyu, J You et al. *Epidemiology & Infection* 148 (2020).