Oliver, Lyu Jiayou

Hong Kong, +(852) 6702-2967, ljyou001@live.com

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. - Harmonic Technologies (HK) Limited

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

- Testing Flow: Cloud + Kubernetes based product deploying, environment sysadmin and testing, tested for 3 major versions, 2 cloud environments of Azure (AKS) and AWS (EKS), ensuring the high scalability for 500 high-quality live service and 10,000+ VOD assets, monitoring cost for test necessary only, Confluence + Jira based progress recording and bug tracking, 3 Time zones (APAC, EMEA, AMS) across the globe delivering well-crafted quality software products to 5+ high profile and ~70 customers.
- 1 of 3 Peacock 2.5: Providing exclusive product testing, experienced supporting and smooth deploying for our most important clients, NBCUniversal Peacock TV & OneApp. 3 Exclusive tools: 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.
- Support Flow: Salesforce (SFDC) + PagerDuty + Jira based cases and bugs tracking; Prometheus, Elasticsearch Kibana and Restful API inspecting; 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.

A.I. Phoenix Technology Corporation Limited

Entrepreneur, Freelancer AI Researcher *June 2020 to February 2021*

- Fighting against COVID-19 with Beijing Aid Wuhan Medical Team and published over 2 academic articles, working with teams from Wuhan, US, UK and HK compiling a 24-hour workflow, Python and Excel based data analyzing and presenting.

HKEX (Hong Kong Exchanges and Clearing Limited)

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

- Pipelined update and migrate IBM Rational Java environment for over 10 workstations in both hardware and software layer.

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 (Programming Language), Amazon Web Services (AWS), Microsoft Azure, Shell scripting, Docker, 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

Hong Kong Baptist University (HKBU)

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.

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

Publications

In-hospital cardiac arrest outcomes among patients with COVID-19 pneumonia in Wuhan, China. Shao Fei, Shuang Xu, Xuedi Ma, Zhouming Xu, Jiayou Lyu, Michael Ng, Hao Cui et al. *Resuscitation* 151 (2020): 18-23. [235 cites by now]

Development and validation of prognosis model of mortality risk in patients with COVID-19. Ma Xuedi, Michael Ng, Shuang Xu, Zhouming Xu, Hui Qiu, Yuwei Liu, Jiayou Lyu et al. *Epidemiology & Infection* 148 (2020). [28 cites by now]