XU, Longyu

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Non-local, eligible to apply for IANG VISA after graduation

EDUCATION

City University of Hong Kong — Hong Kong
Master of Science, Electronic Information Engineering — Sep.2023 - Jun.2024 (Anticipated)
- Relevant Courses: Software Engineering, Security Technology, Deep Learning, Complex Networks, Computer Vision

University of Electronic Science and Technology of China (UESTC) — Chengdu, China
Master of Engineering, Electrical Engineering — Sep.2018 - Jun.2021
- Thesis: Research on Security Control of Networked System Based on Sliding Mode
- Scholarships & SCI papers & Patents

Chongqing Jiaotong University (CQJTU) — Chongqing, China
Bachelor of Engineering, Telecommunications Engineering — Sep.2014 - Jun.2018
- Thesis: Communication system simulation based on e-Labsim (Text and voice transmission)
- National Scholarships & Awards & Honors

WORK EXPERIENCES

LeapXpert HK Limited — Hong Kong
IT & Security Engineer – Intern (Hybird) — Jan.2024 – now
- Migrate & maintain the **SIEM** system to Wazuh platform, implementing decoders and rules based on logs.
- **Malicious activities** detection & alerting based on IP reputation grading system.

Hong Kong Branch of National Precious Metals Material Engineering Research Center at CityU — Hong Kong
Web Developer & Assistant – part time student helper (Hybird) — Nov.2023 – Jan.2024
- Maintain and update the official website of NPMM built with **HTML** and WordPress.
- Assist in processing office documents and analyzing data.

Zhongxing Telecommunication Equipment Corporation (ZTE) — Chongqing, China
Software Engineer – full time (Onsite) — Jul.2021 - Dec.2022
- Developed an ACL management microservice based on GoVPP using **Golang**, leveraging **Redis** for storing intermediate states. Registered **RESTful APIs** to an API gateway, achieving a unified access control solution.
- Designed and developed a log collection tool with Golang, uploading logs to a configured server via SFTP, providing a web-based configuration page built with **Vue.js** for seamless parameter setup. Additionally, an installation script written in **Shell** facilitates easy integration with other services.
- Led the development of a routing scheduling management microservice with Golang, which utilizes **Kafka** and Redis to capture upstream routing topology data-changing. It calls the routing path calculation DLL through **CGO** and exposes RESTful APIs for downstream services to retrieve routes. It is packaged as a **Docker** image and deployed with **Kubernetes** for multi-instance deployment, ensuring scalability and high availability.

Shanghai BenPao Supply Chain Management Co., Ltd. (startup)
General Software Engineer – intern (Remote) — Sep.2019 - Apr.2020
- Developed a shopping mall-themed WeChat Mini Program using JavaScript based on the Mini Program documentation.
- Designed and Developed CRUD REST APIs for users using Python **Flask,** deploying service on a cloud platform and enhance service stability.

TECHNICAL SKILLS

- **Programming Languages:** Golang, JavaScript, Python, C, HTML
- **Dev Frameworks & Tools:** SQL, Redis, Kafka, Nginx
- **Cloud & Devops:** AWS, Docker, Kubernetes, CI/CD, Jenkins
- **Miscellaneous:** Linux, Git, Unit Testing, Scrum, SIEM

(China's) Qualification of Computer and Software Technology Proficiency: *Programmer; Information Security Engineer*
(China's) National Computer Rank Examination: *C Language Programming; Network Technology*

SELECTED PROJECTS

Contract Test Platform Based on PICT Tool | *Full stack developer*
Led the development of an automated contract testing platform using the Microsoft PICT tool. The frontend was built with **React.js**, and the backend utilized **go-gin**. The platform provides user registration and login, hierarchical authority management, log management, and multi-level contract test case management. It caters to nearly **200** department members. With an impressive **95%** effective output test case rate and over **80%** coverage, the platform significantly reduces manual test case creation costs. It is also integrated into a CI/CD pipeline, expediting project iterations.
Relevant skills: javascript(Reactjs), elementUI, golang, PostgreSQL, nginx

BoMan Dance Information Management System | *Full stack developer*
Developed a user information management system for a dance club using the **Vue.js** with **Element UI**, the system encompasses functionalities such as login, registration, check-in, log recording, permission management, and dashboard with charts. Additionally, the system incorporates **WebSocket** for real-time communication, ensuring timely updates and notifications. The frontend and backend components are bundled together using **Electron**, enabling seamless integration.
Relevant skills: javascript(Vuejs), websocket, electron-vue, elementUI, mySQL

ACADEMIC ACHIEVEMENTS

- Chen, Yong & **Xu, Longyu** & Li, Meng. Sliding mode control for direct current motor system with multi-channels and external disturbances. Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering. *(2021, JCR Q4, Student First Author)*

- **Xu, Longyu** & Chen, Yong & Li, Meng. Sliding Mode Resilient Control for TOD-based Servo System Under DoS Attack. International Journal of Control, Automation and Systems. *(2022, JCR Q2, First Author)*

- **Xu, Longyu** & Chen, Yong & Li, Meng & Zhang, Longjie & Mahmoud, Gafary. Extended Observer-Based Hybrid Tracking Control Strategy for Networked System with FDI Attacks. Asian Journal of Control. *(2023, JCR Q3, First Author)*

- Li, Meng & Chen, Yong & **Xu, Longyu** & Chen, Zhangyong. Asynchronous control strategy for semi-Markov switched system and its application. Information Sciences. *(2020, JCR Q1, assistant)*

- Meng Li, **Longyu Xu**, Yong Chen, etc. A control method of multi-channel DC motor system based on second-order super-twisting sliding mode. China, Invention Patent. CN110620528A, December 27, 2019

- Meng Li, Yong Chen, **Longyu Xu**, etc. An adaptive event-triggered asynchronous sliding mode control method for random jump systems. China, Invention Patent. CN111650835A, September 11, 2020

- AnJian Zhou, Yong Chen, **Longyu Xu**, etc. A data-driven vehicle electromagnetic interference suppression method. China, Invention Patent, CN112084714A, December 15, 2020

- Meng Li, **Longyu Xu**, Longjie Zhang, etc. An asynchronous control method of DC-DC converter. China, Invention Patent, CN110429808B, January 26, 2021

- Meng Li, Yong Chen, **Longyu Xu**, etc. A security control method of networked system based on extended observer. China, Invention Patent, CN112596387A, April 2, 2021