Yung-Hung Huang

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EXPERIENCE

Systems architecture   Jan. 2021 – Present
Web Services design

- sauce man
- local-library-website
- Dragon
- boce-crawler

System migration and refactoring

- Deploy architecture from Java spring microservices to Kubernetes
- Deploy architecture from VMs to Dcoker/Kubernetes
- Migration/Refactoring Infrastructure from Alibaba Cloud to AWS
- Backup for Infrastructure

Cloud Computing   Jan. 2021 – Present
Operation

- Amazon Web Services(AWS)
- Google Cloud Platform(GCP)
- Alibaba Cloud
- CloudFlare

Kubernetes   Jan. 2022 – Present
Admin

- Maintain operations for **k8s Cluster**
- Troubleshooting: **pod crashloopbackoff, network, I/O problems(Race Condition, OOM Out of memory)...etc**
- Subsystem research and deploy: **Ingress-NGINX, Cert-manager, Prometheus, Grafana, Redis, RabbitMQ, Elasticsearch, Fluentbit, Kibana, Gitlab runner, Tekton, KubeSphere, EMQX, Nacos, RocketMQ, ZooKeeper**

PROJECTS

sauce man

- Design a discord bot **sauce man** with **Python** coding, **an API wrapper discord.py**, **a PostgreSQL**
- Setup My development environment with **ProxmoxVE/Arch Linux/pyenv/pipenv** and running a sauce man bot under My homelab infrastructure
- **Languages & Tools**: discord developer portal, Proxmox Virtual Environment, Arch Linux, Python, discord.py, pandas, sqlalchemy, PostgreSQL, podman

local-library-website

- Extend My skills with doing **MDN Web Docs: Django Tutorial: The Local Library website**
- Setup My development environment with **ProxmoxVE/Arch Linux/pyenv/poetry** and running a local-library-website with **Python Django Webframework** under My homelab infrastructure
- Research what are **WSGI/ASGI/Gunicorn** when deploy a Django project
- Will add some styles with **tailwindcss** to make this website Beautiful in the future
- **Languages & Tools**: Proxmox Virtual Environment, Arch Linux, Python, Django, Gunicorn, WSGI, ASGI, JavaScript/HTML/CSS, PostgreSQL, SQLite, Docker engine, Tailwind CSS

Dragon

- The main purpose is that "One live stream from clent But push multiple destinations from server-side"
- Building a system based on distributed model with multi k8s Clusters which provides **streaming services**
- Based on an open source project: **SRS(Simple Realtime Server),** we design backend-API with golang as Webhook to extend the SRS server features and frontend interface via React + Next.js.
- **Languages & Tools**: Kubernetes, k6, kubectl-graph, Tekton, C++, ffmpeg, Golang, go-callvis, go-swagger, Alibaba Cloud, GCP, CDN network, JavaScript, Node.js, Docker engine

boce-crawler

- Because of the data loss of our third-party monitoring API when testing with My automation teammate's API wrapper, I need to develope a **crontab task** with **Python** under **Server-side** to extract data on the third-party network monitor dashboard, transform those data, load these data to our MariaDB Database as our grafana datasource.
- **Languages & Tools**: crontab, Python, concurrent.futures, Requests, Beautiful Soup, Selenium, undetected-chromedriver, pandas, SQLAlchemy, docker, MariaDB, Grafana

EDUCATION

National Dong Hwa University   Sep. 2016 – Jan. 2019
Master of Science in Materials Science and Engineering   Shoufeng, Hualien

- **Thesis**: Ultrafast Pump-probe Transient Absorption Spectroscopy of Layer-controllable Molybdenum Disulfide Films
- **Research**: Semiconductor Materials

SKILLS

Languages : Mandarin (native), English (professional working proficiency)
Programming : Python(proficient), C(competence), JavaScript/HTML/CSS(competence), SQL(competence)
Frameworks : Selenium, pandas, SQLAlchemy
Infra : Kubernetes, GitLab Runner, Tekton