

Xi Hou

WA, 98004 | 213-469-7058 | cici.houxi@gmail.com | [linkedin.com/in/hou-xi](https://www.linkedin.com/in/hou-xi) | github.com/cicihou

EDUCATION

Northeastern University

M.S. in Computer Software Engineering - Information Systems, GPA 3.9

Seattle, WA

Sep 2021 – May 2023

Zhongnan University of Economics and Law

B.A. in Business English, GPA 3.2

Wuhan, China

Sep 2012 – Jun 2016

EXPERIENCE

Salesforce Inc

Software Engineer Intern

May 2022 – Aug 2022

Bellevue, WA

- Worked on Detection&Response team to build and optimize **detection engine** Orion for gathering and analyzing security threat-related information across Salesforce
- Designed and built a **cache infrastructure** for detection engine via **Elasticache** and **Redis**, to accelerate the data accessing speed more than **50%**
- Created **unit test&performance test** to improve Orion Cache Client based on metrics and integrated it into **CI/CD workflow**, visualized the business and code logic to help future onboarding

Yimian by Ascential

Software Development Engineer

Feb 2019 – Apr 2021

Shenzhen, China

- Designed and implemented the external data visualizing product and the internal data processing tool, including **API design, database selection and transforming, and data structure adjustment**
- Improved the speed of API and SQL queries more than **90%** via **DB transforming** and **SQL optimizing**
- Facilitated the usability, system stability and data security via implementing **parameterized debug and cache policy**, the **encryption of API and queries**, and the **data backup and isolation** for different levels users

PROJECTS

Webapp & Infrastructure | *Lambda, LoadBalancer, DynamoDB, Cloudwatch*

Sep 2022 – Dec 2022

- Implemented **continuous&automated deployment** triggered by merged PR via **packer, AMI, git workflows**
- Applied **Autoscaling** policy and Loadbalancer to adjust instance size automatically according to CPU utilization
- Built cloud-based email service, composed of **route53, lambda, SNS, dynamoDB** to ensure high availability

Orion Cache Client | *Python, Elasticache, Redis, Terraform, Kafka, Grafana*

May 2022 – Aug 2022

- Built a cache layer based on **Elasticache and Redis** to decrease data queries and improve accessing time
- Implemented the cache client and applied it for alerts deduplicating, design and revise performance test to visualize the effects of cache via different input and edge case
- Transform the data deduplicating process from in-disk database to in-memory cache, improve the deduplicating efficiency from **18%** to **61%**

YiDrone | *Clickhouse, Impala, Oneapm, Kibana*

May 2019 – Apr 2021

- Participated in the **database upgrading** from **MySQL sharding** to **Clickhouse**, responsible for DB research, comparing and speed test, data migration, structural adjustment and system acceptance check
- Implemented the dataflow transformation of processing, calculating and presenting. Implemented the **immediate response of API calling** via **Redis cache**, and built restricted **user permissions** to assure data security

Onemap | *Flask, AWS S3, Pandas, Celery, Supervisor*

Jan 2020 – Feb 2021

- Implemented the structuring of Excel raw data verification and storage using **AWS S3** as an online file staging area and the reversing of structured data via **Pandas**
- Built **version control system** to ensure data accessibility and built configurable **crontab** via **celery** to check the validity of rules regularly, which save 3 man/day a month

TECHNICAL SKILLS

Languages: Python, SQL, Java, JavaScript, HTML/CSS, Swfit, Shell, TSM, VBA, Latex

Tools and Framework: Flask, Django, SpringBoot, Vue.js, Jquery, Linux, Nginx, Git, Vim, Kubernetes, Docker, Kafka, MySQL, Redis, Clickhouse, Impala, Hive, AWS S3/EC2/Lambda/DynamoDB/Elasticache/Cloudwatch