

Huang Yihong

Work Experience

Microsoft - OneDrive SharePoint

Seattle, Washington, USA

Software Programmer January

2021 - September 2021

- Refactored the entire Auth framework to improve its structure and logic, including multiple different authentication protocols
- Collaborated with other services (in the S2S functional team) on Auth logic permissions modifications and improvements

Amazon

Seattle, WA, USA

Software Developer

March 2019 - December 2020

- Information Security Payments

- Implemented Signature Version 4 signatures to add authentication information to AWS Https requests
- Implemented SigV4 signature verification, identity passing, date, throttling, and reply verification for API Gateway
- Modified the corresponding AuthZ and AuthN steps to adapt to SigV4.
- Enable WAFv2 to monitor HTTPS requests forwarded to Amazon API Gateway
- Encrypt and sign sensitive information using AWS KMS and Secret Manager.
- Build Pipelines, including multiple phases, approval workflows, and integration tests.

- AWS QuickSight ML Insights

- Added new feature of supporting small training data sets for algorithmic anomaly detection, reducing the minimum training data required from 40 to 25
- Helped launch Alert service, including designing and implementing Error Handler, some APIs, Lambda, corresponding Step Function modifications, business metrics (using Kinesis Data Firehose), DynamoDB on-demand and automatic backup, context-aware logging, etc.
- Support data source/set internal IDs for public APIs in anomaly detection

Frugalops

Vienna, Virginia, USA

Backend Software Programmer

March 2018- February 2019

Online Education Platform

- Developed a Restful API for an online education website using the Django Rest framework.
- Implemented a PostgreSQL database built on Docker containers and implemented database schema migration,

- Implemented JWT authentication and model-level and object-level (Django Guardian-based) authorization
- Created Dockerfile for building Docker image and Docker Compose to run multiple containers simultaneously.
- Developed a view for fetching information from and uploading files to the Amazon S3 bucket
- Implemented e-mail service by using SQS as a proxy to create asynchronous task queues (using Celery)
- Use AWS Lambda functions to monitor AWS resources
- Include two types of triggering mechanisms, CloudTrail log files and event schedulers on CloudWatch
- Create CloudFormation templates to assign different angles to different Lambda functions
- Set up CI/CD pipeline on AWS

Technical Skills: Java, Python, C#, AWS, Django Rest, Hadoop, MapReduce

Education

George Washington University - GPA: 3.85, Washington, DC, USA January 2016 - December 2017

Statistics, Master

Zhongnan University of Economics and Law; Wuhan, Hubei September 2010 - June 2014

Finance, Bachelor

University of West Georgia Carrollton; Georgia, USA August 2012 - April 2013

Finance, Bachelor

Certifications: SAS Certificated Based & Advanced Programming for SAS 9 credential; FRM exam part I; SOA in progress (P, FM, MFE passed)