

SUMMARY

- 7 years working experience in enterprise software and internet industry.
- Proficiency in Java and C sharp basics, concurrency programming and web frameworks.
- Solid understanding of JVM principles, including memory model and garbage collection mechanisms.
- Hands-on experience in microservices migration and building a microservice from scratch.
- Strong knowledge on MySQL databases, including high availability and high performance patterns.
- Familiar with high performance middleware such as Redis Cache and Kafka.
- Hands-on experience with Kubernetes for service deployment and operations.

EXPERIENCE

Senior Software Engineer - Authorization Domain Expert and Critical Service Owner

Microsoft, Redmond, WA

May 2017 - Sep 2022

- Led the migration of authorization service from monolithic app and drove the service availability to five nine standard.
- Led the auth framework migration from ADAL.NET to MSAL.NET, preventing SPOF in token issuing service.
- Led Microsoft wide initiative to support proof of possession authentication token, unblocking selling to Financial SaaS.
- Drove the adoption of next-generation Microsoft Authorization protocol for \$5M/y team-wise COGS reduction.

Software Engineer

OpenText, San Mateo, CA

October 2015 - April 2017

- Implemented column-based report data source compression for top level Eclipse open source project BIRT, resulting in a 16% less data than original row-based compression on average (Java).
- Enhanced gantt charts exporting features for HTML5 with Javascript and Highcharts.
- Developed integration testing with Maven and Selenium for report war files on embedded Tomcat server.

Software Development Intern

Financial Industry Regulatory Authority (FINRA), Rockville, MD

May 2014 - August 2014

- Developed a Role Permissions Compliance System on AWS, which was later featured in AWS re:Invent 2015.
- Created Python scripts to fetch permission settings from AWS IAM and compared with benchmarks in S3.
- Integrated with Splunk and AWS CloudTrail to automate the process of daily/monthly security checking, leading to a 13.5% reduction in AWS billing line items in 1 month.

EDUCATION

University of Maryland, College Park

Master of Professional Studies in Technology Entrepreneurship

Feb 2019 - May 2021

Johns Hopkins University

Master of Science in Information Security

September 2013 - May 2015

University of Science and Technology of China

Bachelor of Engineering in Computer Science

August 2009 - July 2013

PAPERS

Automatic Tag Saliency Ranking for Stereo Images

- Yang Cao, Kai Kang, Shijie Zhang, et al.

Neurocomputing, 2015

Underwater Stereo Image Enhancing Using a Physical Model

- Shijie Zhang, Jing Zhang, et al.

ICIP, 2014

A Novel Segmentation-based Video Denoising Method with Noise Level Estimation

- Shijie Zhang, Yang Cao, et al.

MMM, 2013 (Oral) & Invited to Information Sciences, 2014