

WORK EXPERIENCE

Software Engineer II

Microsoft, Redmond, WA

May 2017 - Present

- Owned tier zero Teams authorization service and drove the service availability to five nine standard.
- Designed cross-team shared libraries such as traffic replay and stale caching for improving testing and resiliency.
- Led the effort for POP token which could be directly passed along to downstream services and saved the org \$2.3M/y.

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.

Research Assistant (Multimedia processing)

National Engineering Lab of Speech and Language Information Processing, Hefei, China

March 2012 - July 2013

EDUCATION

University of Maryland, College Park

Master of Professional Studies in Technology Entrepreneurship

Feb 2019 - Present

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

PUBLICATIONS

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