Ning Wang

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Programming Languages & Tools

- **Languages:** *Java, Python, SQL, GraphQL, TypeScript, JavaScript, Ruby, Bash*
- **Tools:** *REST, Spring Boot, Django, PostgreSQL, GraphQL, Git, Liquibase, Elasticsearch, Docker, Jenkins*
- **AWS:** *EC2, CDK, API Gateway, SQS, S3, CloudWatch, ECS, Fargate, CloudFormation, EventBridge*

Professional Experience - Backend / Full Stack

VMware - End User Computing, Software Engineer   07/2022-present

- Built a Custom Role Framework for enterprise users like **PWC, Adobe, and Walmart** to help managing **200+** Role Based Access Control scopes. Achieved customer access classification based on role levels and subscription plans, secured user files and data by isolating read/write/share access.
- Going an extra mile, enhanced Custom Role Framework by developing a Freestyle Role Generator. Given super admins the ability to create Freestyle Roles with any arbitrary combinations of accessibilities. Freed enterprise admins from over/under-sharing data access to team members.
- Looking out for the team, led a group of 3 engineers to develop a toolkit which eliminated 60% of the team's Escalations caused by user login failures, reduced 60% oncall load for a 20-engineers-team. Designed ESC mitigation workflows and test plans. Same mitigation workflow then used on solving ESCs in other teams.
- Built a Marketplace feature for enterprise users to search dashboards and monitoring metrics. Enabled searching by name and description, saving users' time spent on manual selecting.
- To ease sister UI team's workload, enriched user domain info by building **GraphQL** queries on top of 20+ **RESTful APIs**. Helped UI team to retrieve info through multiple microservices, saved data fetching time.
- Leveraging **Spring Boot**, **Java, PostgreSQL, GprahQL, and Ruby** to build the backend code and databases for business logic. Built **APIs** for internal and public use cases.
- Designed DB schemas and data migration strategies. Used **Liquibase** for schema and data version control.
- Utilizing **AWS** components to build the Cloud Infrastructure for our **Microservices**. Using **SQS** for message queueing, **API Gateway** for API monitoring, and **RDS** for database management.

Amazon Web Services - AWS Connect, Software Engineer   07/2021-10/2021

- Built a **Microservice** to execute Phone Call History Report, decoupled team specific API based service.
- Leveraged **CDK** to build a **Serverless AWS** based **Cloud Infrastructure**. Utilized **EventBridge** to absorb and route call ID, used **SQS**, **ECS**, **Fargate** to process asynchronous events, stored reports in **S3** buckets.
- Utilized **Java** to implement backend service code, used **TypeScript** to define **AWS CDK** infrastructures.
- Used **Ruby** to configure internal monitor dashboard, provided real-time service metrics report to the team.

VMware, Inc., Software Engineer - Test   05/2021-07/2021

- Implemented a multi-version **Python/Pytest** compatibility module for team's development/testing framework.
- Designed **PyTest** plugins to improve testing efficiency, boosted the overall testing efficiency up by **15%**.
- Built a status monitoring tool, enabled VMware teams with better observability on test phases and logs.

Nutanix, Collab Software Engineer   09/2019-06/2020

- Built a Honeypot Monitor System to manage deployment and configuration of distributed honeypots.
- Implemented log management module with **Fluent-bit**, **Fluentd** and **S3,** boosted collecting efficiency by **30%**.
- Leveraged **Django REST** to provide backend interfaces and utilized **ReactJS** for web development. Enabled activation and termination functionalities for the honeypots. Leveraged **Docker** for backend deployment.

Education

University of Washington (Seattle, WA)   07/2022

- Electrical and Computer Engineering, Master of Science, GPA: 3.82/4.0

Xidian University (Xi'an, China)   06/2019

- Telecommunications Engineering, Bachelor of Engineering, GPA: 3.7/4.0