

ZHIYUAN (ZANE) LIN

Vancouver, BC, Canada

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WORK EXPERIENCE

Amazon Web Services, S3 Transport

Software Development Engineer

12/2018 - 07/2021

Vancouver, Canada

- Led development of highly concurrent services, coordinating work across several different teams and managing project delivery process from design to launch and operation.
- Developed a large-scale distributed system that processes over 3 petabytes of S3 data a day utilizing AWS technologies such as SQS and DynamoDB.
- Designed and implemented highly scalable asynchronous APIs that serves tens of thousands of transactions per second combining serverless and traditional technologies.

Amazon Web Services, S3 Cross Region Replication

Software Development Engineer

02/2017 - 12/2018

Vancouver, Canada

- Scaled an event-driven system to serve over 100k transactions per second, implementing scheduling and rate limiting functionalities to maintain fairness of resource allocation and protect dependencies.
- Developed critical security feature used by thousands of enterprise customers.

MosaixSoft, Inc.

Software Engineering Internship (Cloud Computing)

04/2015 - 08/2015

Los Altos, USA

- Developed a cloud security management system that provides a high-level interface for monitoring and configuring the security of cloud platforms such as OpenStack and AWS.
- Researched and developed solutions for resource allocation in cloud.

China Life Insurance Company

Software Engineering Internship (Web Development)

02/2014 - 07/2014

Guangzhou, China

- Implemented a human resource management system that facilitates the management of thousands of employees using ASP.NET (C#) web services and Microsoft SQL Server.
- Created an AJAX-based interactive web front-end for the system in Javascript with jQuery.

* Supporting family member in need while working on personal projects from August 2021 to January 2022.

EDUCATION

University of Waterloo, Waterloo, Canada

Master of Applied Science in Electrical and Computer Engineering

GPA: 97.60/100

Awards: Faculty of Engineering Award

09/2014 - 08/2016

University of Glasgow, Glasgow, UK

Master of Science in Information Technology with Distinction

GPA: 20.053/22

09/2012 - 12/2013

Renmin University of China, Beijing, China

Bachelor of Economics

09/2008 - 07/2012

PROJECTS

Graph Automorphism-Based, Semantics-Preserving Security for the RDF

09/2015 - 08/2016

- Designed and implemented an algorithm that secures RDF graphs using satisfiability (SAT) solvers. The result was published on CODASPY '17.

Joos 1W Compiler

01/2016 - 04/2016

- Developed a compiler from the Joos 1W language, a large subset of Java, to NASM assembly.

Matching Algorithms Toolkit

04/2013 - 08/2013

- Implemented and optimized several matching algorithms to solve the House Allocation problem.

SKILLS

Programming Languages (in order of proficiency): Java, Python, Ruby, Kotlin, R

AWS Technologies: S3, EC2, DynamoDB, SQS, Lambda, API Gateway, Step Function, Route 53, etc.

Frameworks and Libraries: Scipy, SageMath, Flask, Spring Boot