


Tian Luan

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EDUCATION

University of Illinois Urbana-Champaign	Aug 2022 - May 2024 (Expected)
Master of Engineering in Electrical and Computer Engineering	(GPA: 3.94/4.00) Champaign, IL
Australian National University	Jul 2019 - Jul 2021
Bachelor of Advanced Computing (Honours)	(GPA: 3.75/4.00) Canberra, Australia
Shandong University	Sep 2017 - Jul 2021
Bachelor of Engineering in Computer Science	(GPA: 3.83/4.00) Shandong, China

SKILLS

Programming Languages: Java, Go, Python, JavaScript/TypeScript, C/C++, Rust, HTML, CSS, SQL
Cloud & Database Technologies: AWS, GCP, MongoDB, MySQL, PostgreSQL, Redis, Neo4j
Development Tools/Frameworks: Docker, Kubernetes (K8s), gRPC, protobuf, Kafka, Spring, Maven, Linux, Git, Postman, React.js, Next.js, Redux, Node.js, JUnit, TestNG, Flask, Bootstrap, Jetty, Jira, Asana

PROFESSIONAL EXPERIENCES

Amazon Web Services, Inc. Aug 2023 - Nov 2023 (Expected)
Software Dev Engineer Intern, AWS Amplify Hosting Team *Seattle, WA*

- Leading the enhancement of Access Log experience for AWS Amplify Hosting using **Java** and **TypeScript**, targeting issues of log retrieval latency and timeouts for Apps deployed on **Amazon CloudFront**
- Implementing real-time Access Log streaming using **Amazon Kinesis Data Stream** and developing a Amazon Kinesis Data Stream Consumer that runs on **AWS Fargate**, designed to parse real-time Access Log and push them to **Amazon CloudWatch** for advanced log filtering, analysis, and querying in real-time
- Achieving seamless integration among **Amazon CloudFront**, **Amazon S3**, **Amazon Kinesis**, **AWS Fargate**, and **Amazon CloudWatch** to provide an end-to-end real-time Access Log solution

Yahoo Inc. May 2023 - Aug 2023
Software Engineering Intern, Core Mail Backend Team *Remote*

- Built the Telemetry Dispatcher middleware for Yahoo Mail backend using OpenTelemetry Collector , streamlining telemetry data routing to downstream vendors including Splunk Data Platform and YAMAS
- Automated build and test processes with Screwdriver.cd, reducing lead time and recovery time by **33%**
- Deployed on **Google Kubernetes Engine**, projected to handle **75M** metrics/min and **750 TiB** logs daily
- Contributed a **Go**-based metrics processor to the CNCF-incubated OpenTelemetry open-source project
- Developed an asynchronous Access Log **Java** Library for **Jetty**, improving throughput by **47%**

Tovala Inc. Feb 2023 - May 2023
Industry-Collaborative Capstone Project *Champaign, IL*

- Led the **Python**-based Tovala Automated Test Engine (TATE) project, saving **0.8 FTE** continuously
- Provided RESTful APIs to control TATE using **Flask** and employed **gRPC** for internal communication
- Boosted system efficiency by **40%** and reduced message latency by **31%** using **Kafka** as the message broker

RELATED PROJECT

NiceHomestay Aug 2022 - Dec 2022

- Developed a dynamic accommodation review platform and deployed it on **Heroku**
- Crafed a responsive web interface using **React** with **HTML/CSS/JavaScript**, styled with **Bootstrap**
- Implemented RESTful APIs with **Node.js** and architected a **MongoDB** database schema to store data
- Integrated geospatial mapping capabilities via MapBox APIs, enabling dynamic map visualization