Zhiheng Liu

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EDUCATION

Nanyang Technological University

Aug 2017 - May 2021

B.Eng. in Electrical and Electronic Engineering CGPA 4.95/5.00

Singapore Science and Technology Scholarship

Full scholarship issued by Singapore Ministry of Education

Dean's List

YGPA: 4.95 (2017-2018), 4.94 (2018-2019), 5.00 (2019-2020)

University of California, Los Angeles

July 2018 - Sep 2018

Study Abroad, Summer Study

SKILLS

Programming languages: Golang, Typescript, C++, Java

Tools: Linux, Docker, Kubernetes, Prometheus, Zookeeper, Spark, Elasticsearch, Git

EXPERIENCE

SenseTime International Pte. Ltd

Jan 2020 - July 2020, Aug 2020 - Present

Platform Software Engineer Intern @ AIoT platform

- Decreased cloud server load from 14,000 to 3,000 queries per second and reduced latency to 30% for face recognition, by developing an AIoT database synchronization module in Golang to distribute cloud server workload to end systems.
- Fastened feature extraction speed by 500% in CPU environment, by optimizing feature extraction to execute in parallel and deploy multi-pod service on K8S.
- Contributed to firmwide open-sourced AIoT communication platform, by implementing device management module and application management module in Golang.
- Eliminated manual data collection in production, by designing an automatic data collection module in Golang.
- Researching on the design of a general-purpose model performance monitoring and data collection system, Poseidon.

Goldman Sachs Group, Inc.

July 2020 - Aug 2020

Platform Software Engineer Intern @ Core Engineering

• Cutting cost on idle services running on thousand-level servers by designing an auto-scaling task scheduling service using Spark, which automatically schedules tasks on firm's resource pool and scale down when services are idle.

Narus Knowledge Pte. Ltd

Feb 2019 - Oct 2019

Part-time Software Engineer @ Initial Core Team

- Built a knowledge processing service for Singapore Attorney-General's Chambers, by productizing an AI model and
 integrate with Elasticsearch, empowering lawyers to manage their knowledge on fingertips.
- Built a fuzzy string search service for lawyers, by implementing a multi-match fuzzy string searching algorithm to achieve target extraction from long articles.

Visa Inc. May 2019 - Aug 2019

Software Engineer Intern @ Operation & Infrastructure

• Eliminated manual server monitoring, by proposing the solution on developing process, file system and memory monitoring services utilizing Prometheus node exporter.

PROJECTS

NTUVibe July 2018 - Jan 2020

Creating a campus-wide popular utility web app, by implementing a schedule generator module and contributing to course content scraper module.

Vedig July 2019 - July 2020

Led a team of six on developing a school-sponsored information and event management Flutter/Django full-stack app.

AWARDS

DBS pShift global hackathon

Won first runner-up with prize for 25,000 USD by designing a mobile freelancer platform, which promises customer-worker consensus and content providing with recommendation system.