Zhiheng Liu

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EDUCATION

Nanyang Technological University   Aug 2017 – May 2021
B.Eng. in Electrical and Electronic Engineering   **GPA 4.95/5.00**
Singapore Science and Technology Scholarship
Full scholarship issued by Singapore Ministry of Education
Dean's List
2017-2018, 2018-2019

University of California, Los Angeles   July 2018 – Sep 2018
Web design, Operating System

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

- Expanded firm's scheduling platform to multi-lingual by creating a Spark-based high available scheduling service, which schedules tasks to thousand-level servers on firm's resource pool.

Narus Knowledge Pte. Ltd   Feb 2019 – Oct 2019
Part-time Software Engineer @ Initial Core Team

- Built a knowledge management web application for Singapore Attorney-General's Chambers, by productizing a tag extraction BERT model and integrating with Elasticsearch, empowering lawyers to manage their knowledge on fingertips.
- Built a long sentence searching service for lawyers, by implementing a multi-match fuzzy string searching algorithm to achieve sentence and paragraph searching in 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 utility web app, serves **1000+** users daily at peak period, 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.