David Hanan Li

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EDUCATION

Georgia Institute of Technology, Atlanta GA

Master of Science in Computer Science, Systems Specialization Anticipated Graduation Date: December 2021 Relevant Courses: Advanced Operating Systems, Cloud Systems, Big Data Systems, GPA: 4.0 Database System Design

University of Michigan, Ann Arbor MI

Graduated May 2020 Bachelor of Science in Computer Science GPA: 3.823 Bachelor of Science in Data Science

Relevant Courses: Operating Systems, Machine Learning, Web Systems, Data Structures and Algorithms

EXPERIENCE

Google, Mountain View CA

Software Engineer Intern

May 2021 - Current

- Responsible for metadata syncing of internal metadata catalog team.
- Populated metadata field for at least 28% of catalog entries by building a data processing pipeline in C++ to sync in and process data from another source.
- Designed and added new commands to command line tool using C++ to allow
- Analyzed and optimized data processing pipeline performance through sharding and filtering.

Microsoft, Seattle WA

Software Engineer Intern

May 2019 - August 2019

- Responsible for performance optimization for backend service in an internal Microsoft Advertising team.
- Improved Authentication API speed by 10% on average by optimizing .NET C# service's architecture.
- Lowered .NET service's garbage collection active time by 20%, decreased service's commit size RAM by 25% by changing the backend software architecture of service.
- Analyzed system performance and changed software architecture by utilizing regular and REDIS caches

Intel, Shanghai China

Software Engineer Intern

July 2018 - August 2018

- Increased availability for CI web application by 50% by implementing load-balancing and containerization solutions to web application using HAProxy and Docker
- Upgraded internal CI web application tool in Django from Python 2 to Python 3

RESEARCH

Miniature Tether Electrodynamics Experiment (MiTEE), Ann Arbor MI

Assistant Lead of Command and Data Handling Sub-team

January 2019 – August 2020

- Assistant lead
- Developed custom file system for cube satellite using C, communicating with hardware through SPI
- Led team to build real time visualization dashboard for satellite's data using Python Flask and Javascript
- Designed MiTEE's public website, using HTML and Bootstrap CSS

Dynamic Project Management Lab, Ann Arbor MI

Research Assistant

September 2019 - June 2020

- Built Digital Twin real time tracking system of robots in construction site with latency of 1.2 seconds using Unity and Microsoft Azure.
- Designed and implemented system to track and store brick locations and update blockchain smart contract using Microsoft Azure IoT and Microsoft Azure Blockchain Workbench.
- Implemented Reinforcement Learning algorithm for Digital Twin robots in Unity C#

SKILLS

Programming Languages: C++, C, C#, Python, HTML, CSS

Frameworks and Services: Unity, .NET, pyTorch, Flask, React, Docker, HAProxy