David Hanan Li

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EDUCATION

Georgia Institute of Technology, Atlanta GA   *Graduated December 2021*
Master of Science in Computer Science, Systems Specialization   *GPA: 4.0*
Relevant Courses: *Advanced Operating Systems, System Issues in the Cloud*

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, Seattle WA
Software Engineer   *February 2022 – Current*
- Built data pipelines in **SQL and Java** that processes petabyte scale of ads data from an online advertising panel for modelling purposes.
- Proved potential for driving **million-dollar** scale of revenue by implementing a cascading waterfall statistical model.
- Designed and Implemented complex heuristic algorithms for categorizing web activity based on key features using **Java.**
- Leading team to leverage **LLM technology** to build a natural language to graph dashboard for metrics visualization for clients.
- Designed and built backend and frontend survey feature for users to collect additional privacy safe information using **Java and typescript.**

Google, Mountain View CA
Software Engineer Intern   *May 2021 – August 2021*
- Responsible for metadata syncing of internal metadata catalog team.
- Processed and populated metadata field for at least **28%** of all considered catalog rows by building a data processing pipeline in **C++** to sync in data from another source.
- Reduced pipeline runtime by **83%** through optimization techniques such as sharding, filtering, and heuristic matching with prefix tries.
- Designed and added new commands to internal command line tool using **C++.**

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

RESEARCH

Miniature Tether Electrodynamics Experiment (MiTEE), Ann Arbor MI
Assistant Lead of Command and Data Handling Sub-team   *January 2019 – August 2020*
- Developed custom **file system** for cube satellite using **C**, communicating with hardware through **SPI**
- **Implemented and tested heartbeat communication potocol for transmitting data back to Earth in** C**.**
- Designed and built backend **SQL** database, server and Grafana dashboard to store, process, and visualize satellite data.
- Designed MiTEE's public website, using HTML and Bootstrap CSS

SKILLS

Programming Languages: C++, C, Java, SQL, Python, HTML, CSS, Go
Frameworks and Services: Azure, Kubernetes, Mininet, Docker, .NET