# Brian Li

SOFTWARE ENGINEER · UBER

*San Francisco Bay Area*

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## Education

**University of California San Diego**                                          *La Jolla, California*

M.S. COMPUTER SCIENCE                                                           *Sep. 2021 - Dec. 2022*

- GPA: 3.96 · Focus: Systems
- Teaching Assistant: CSE124 - Networked Services, CSE123 - Computer Networks

**University of California San Diego**                                          *La Jolla, California*

B.S. COMPUTER SCIENCE                                                           *Sep. 2018 - Jun. 2021*

- GPA: 4.0 · Summa Cum Laude · Provost Honors

## Experience

**Uber**                                                                       *San Francisco, California*

SOFTWARE ENGINEER I/II                                                          *Feb. 2023 - Ongoing*

- Fulfillment Shopping Team → Forge Team → Presto Team
- Consistently in the 95th+ percentile for company-wide IC contributions
- Assisted with an ongoing migration effort of a key endpoint which resulted in a 39% reduction in latency and 71% reduction in server error rates
- Identified MySQL query optimizations and incorrect assumptions about isolation levels, which improved latency and correctness
- Implemented and own an internal validation service and library which is used to ensure correctness during large-impact refactors
- Primary contributor for internal migration of Presto onto Kubernetes

**Uber**                                                                       *San Francisco, California*

SOFTWARE ENGINEER INTERN                                                        *Jun. 2022 - Sep. 2022*

- Fulfillment Shopping Team
- Migrated and optimized the rider set info feature onto the new stack
- Created a tool to generate a graphviz graph for the internal task framework

**Uber**                                                                       *Sunnyvale, California (Remote)*

SOFTWARE ENGINEER INTERN                                                        *Jun. 2021 - Sep. 2021*

- Presto Team
- Reduced the load on presto clusters by implementing a cache invalidation mechanism for repeated queries
- Implemented a feature that identifies materialized view candidates to optimize Overlapping Moving Window query signatures

**Dropbox**                                                                    *San Francisco, California (Remote)*

SOFTWARE ENGINEER INTERN                                                        *Jun. 2020 - Sep. 2020*

- Sync Everything Team
- Extended the Dropbox Screenshots feature on macOS to include screen recordings
- Migrated screenshots into computer backups, allowing users to seamlessly migrate and organized saved screenshots

**LinkedIn**                                                                   *Sunnyvale, California*

SOFTWARE ENGINEER INTERN                                                        *Sep. 2019 - Dec. 2019*

- Metadata Platform Team
- Designed an adapter to leverage an internal NoSQL key-value document store for better scalability
- Designed a migration plan to support hot migation with zero data loss and minimal downtime

## Projects & Competition

**Presto Open Source Contributions**

- Added parquet block stats to operator summaries to provide visibility on the benefits of parquet column sorting
- Identified and resolved an infinite loop in the Presto Optimizer which caused timeouts and stack overflows for specific query signatures

**Rusted Kafka**

- Implemented a distributed message brokering service based off Kafka in Rust
- Leveraged ZooKeeper to provide distributed consensus for leader elections, metadata management, and notifications